



SERVICE MANUAL B221.G2 - B212.G2

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BALATRON 221/212 USER'S MANUAL



Fig. 1 Balatron 221



Fig. 2 Balatron 212

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.Prior of the installation of the unit described in this manual, user should read this manual carefully to be instructed properly on installation, use and maintenance of the unit.

.Failing to read this manual and operate accordingly may cause damage to the user or the unit.

.FASEP 2000 srl shall not be responsible for inconvenience, breakdown, accidents due to uncomplete knowledge of this manual or uncomplete application of recommendations described in this manual.

.FASP 2000 srl shall not be responsible for inconvenience, breakdown, accidents due to unauthorized modifications of the unit, use of non-original or unauthorized accessories (see Accessories listing in this manual for a list of original accessories available for this model).

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SYMBOLS AND CONVENTIONS

To speed the retrieval of main information and make easy to understand the instructions, this manual uses the following typing conventions:

<NAME OF THE PUSH BUTTON> Used to indicate name of push-buttons on the control panel.

DISPLAY Used to indicate text or number visible on the displays on the control panel.



ADVICES

Contain useful advices or solutions, evidenced with respect to the rest of the text.



NOTE

Notes contain important information, evidenced to the rest of the text.



WARNING

Warning messages appears corresponding to procedures that, if not properly observed, may lead to loose of data or cause damage to the unit.



CAUTION

Caution messages appears corresponding to procedures that, if not properly observed, may cause injuries to the user.

TABLE OF CONTENTS

WARNING	ii
SYMBOLS AND CONVENTIONS	ii
TABLE OF CONTENTS	iii
1 PRESENTATION	1-1
1.0 Intended Use	1-1
1.1 Definitions	1-1
2 INSTALLATION	2-2
2.1 Moving the unit	2-2
2.2 Assembling the unit	2-2
2.3 Installation	2-2
2.4 Electrical Hookup	2-2
3 USE THE CONTROL PANEL	3-1
3.1 Meaning of keys at the keyboard	3-1
3.2 Meaning of Led Indicators	3-1
4 CALIBRATION	4-1
4.1 How to calibrate the Wheel Balancer	4-1
4.2 How to check the calibration of Wheel Balancer	4-2
5 MEASUREMENT AND CORRECTION OF UNBALANCE	5-1
5.1 Placing the wheel rim on the wheel balancer	5-1
5.2 How to compensate unbalance of flanges using AFC function (optional for B212)	5-1
5.3 Input of Rim Dimensions	5-2
5.4 Detecting and correcting unbalance	5-4
5.5 How to apply the weight using ALU-SE indicator	5-4
6 HOW TO OPTIMIZE UNBALANCE OF THE WHEEL	6-1
7 HOW TO USE SPLIT WEIGHT FUNCTION	7-1
8 SPECIAL FUNCTIONS MENU	8-1
8.1 Enter in the special functions menu	8-1
8.2 Diagnostic program of sensors	8-1
8.3 Statistic program	8-1
8.4 User Setup	8-1
APPENDIX	i
A: Technical Data	i
B: Environmental Data, Safety Features and Requirements	i
C: Errors and Malfunctions recognized by the Computer	i

1 PRESENTATION

1.0 Intended Use

This unit is designed to measure and correct static and dynamic unbalance of vehicle wheel, the dimension and weight of which are within the working range of the machine (see "Technical Data" appendix for reference)

This unit is meant for a professional use. Operator shall be properly trained before use. Training Course is not included in the price of the unit and must be purchased separately.

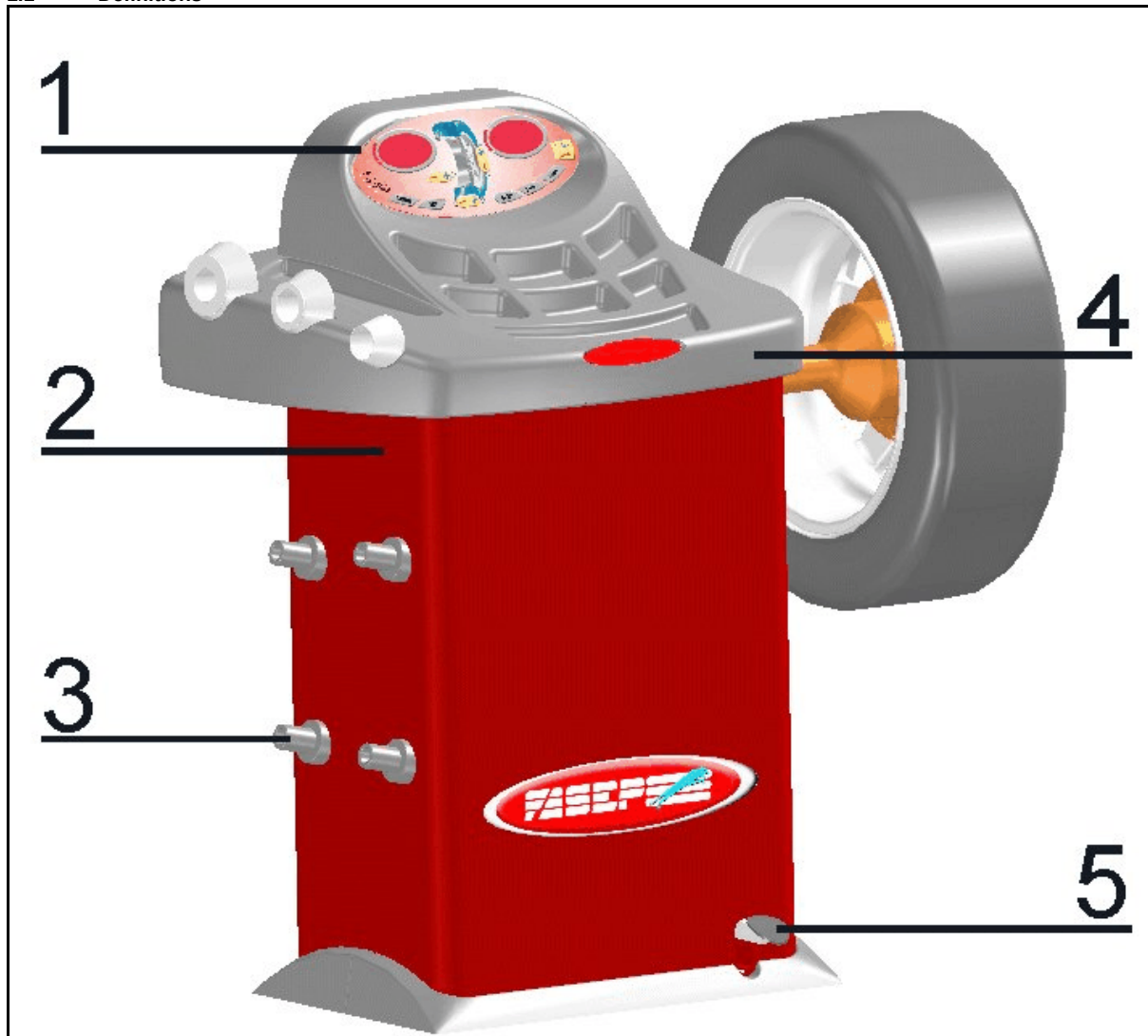
This unit is designed for indoor use only (see "Environmental Data" appendix for reference).



CAUTION

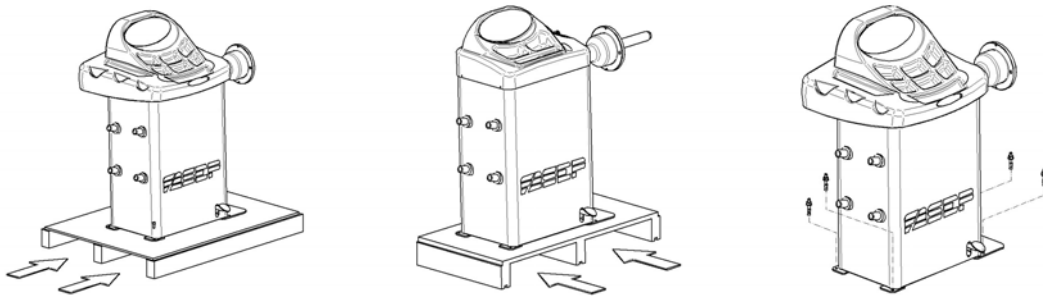
This unit is designed to spin vehicle wheels only, within the range of dimensions and weight approved (see "Technical Data" appendix for reference). Special adaptors suit this purpose. Do not attempt to use the machine to spin anything else. Unproper locking may cause the part being spun to be ejected, causing damage to the unit itself, the operator or anything in the in the neighborhood.

1.1 Definitions



- 1. 3D console
- 2. Nameplate label
- 3. Flange holders
- 4. Weights and tools compartments
- 5. Foot-pedal brake

2 INSTALLATION



2.1 Moving the unit



WARNING

When the unit has to be moved: never lift balancer by motor shaft or by neighborhood of it.

2.2 Assembling the unit

For ease of transportation, the wheel balancer might be disassembled into units. If necessary, assembling instruction are provided within each package.

2.3 Installation

The wheel balancer must be installed on a firm and level ground.



NOTE *The machine must be secured to the floor. Using four holes in the base and anchor bolts provided.*

2.4 Electrical Hookup



CAUTION

Failure to follow these instructions can results in damage to unit or create an electrical hazard and will void warranty.

2.4.1 Electrical hookup is to be provided by a qualified electrician.

2.4.2 A fusible wall-mounted switchbox is required at the installation site. This switch should provide on-off control and overload protection for your wheel balancer only. The switchbox should be fused with time-delay fuse(s) in accordance with the power rating specified on your wheel balancer.

2.4.3 Electrical connection of the machine should be by plug connectors.

2.4.4 The balancer must be effectively connected to ground. The electric cord is regularly provided with a ground terminal.

2.4.5 Make sure that Power Rate Specifications for your wheel balancer (refer to nameplate on the wheel balancer) comply with those provided by the external power source.



CAUTION

After electrical hookup has been performed unit is ready to operate. Always observe pertinent safety precautions when operating the unit (see Appendix tables for an overview of relevant Safety requirement).

3 USE THE CONTROL PANEL

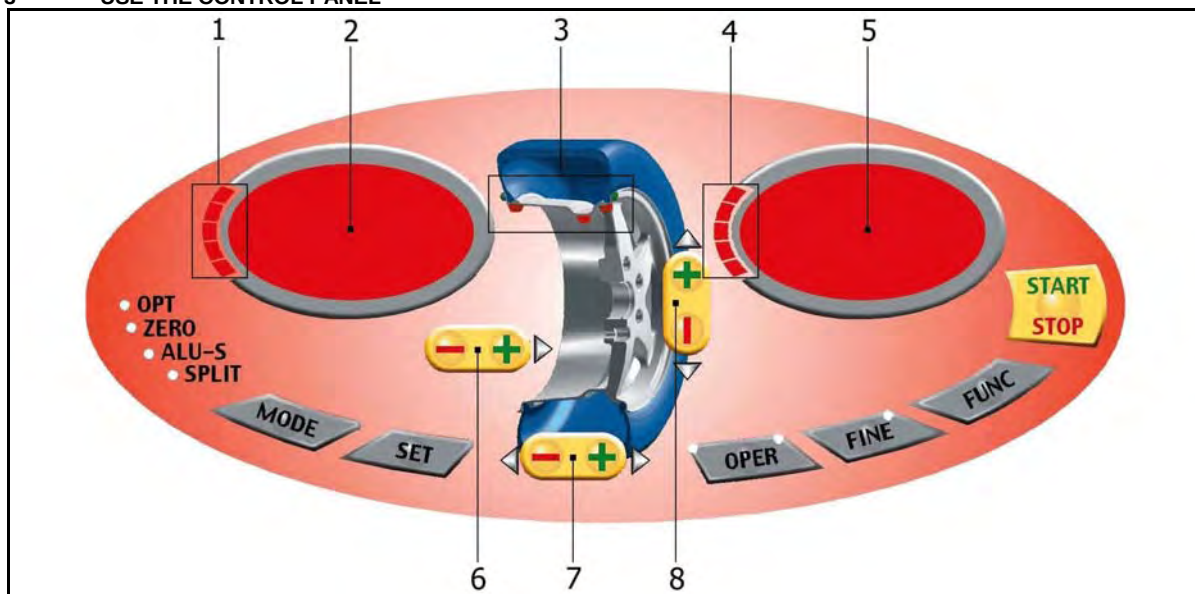


FIG. 7: Panel Balatron 2000

3.1 Meaning of keys at the keyboard

These instructions apply to Normal Operating Mode. Other function maybe activated by these keys in other operating modes (see Special Functions).

<MODE>: To select balancing type: Dynamic-Static-Alu.
 <SET>: Confirm selection
 <OPER>: To select Operator 1 or Operator 2.
 <FINE>: To select reading scale.
 <FUNC>: To select specific functions
 <START-STOP>: Starts-stops wheel spinning.
 6 <DISTANCE -/+>: Set internal side measure.
 7 <WIDTH -/+>: Set width measure.
 8 <DIAMETER -/+> Set diameter measure.

3.2 Meaning of Led Indicators

1-4: indicate location of weight required.
 2-5: indicate amount of weight required.
 3: indicate the application point of weights.

4 CALIBRATION

4.1 How to calibrate the Wheel Balancer



NOTE the following symptoms indicate need for calibration:

- a) check calibration program fails.
- b) constant low or high weight readings.
- c) indicated point of unbalance constantly wrong
- d) more than 2 spins required to balance wheels repeatedly

SOF 2.00

SET

CAL

SET

CO

START

CO RUN

C1

START

C1 RUN

C2

START

C2 RUN

CAL

Switch on the wheel balancer.
Press **<SET>** when **SOF X.XX**
(software version) is displayed.

Spin the empty shaft (Fig. 9).



FIG. 9

Place a wheel on the flange (Fig. 10).

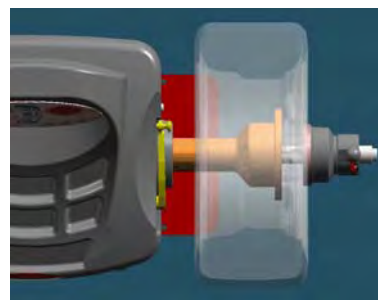


FIG. 10

Put the calibration weight (Fig. 11).

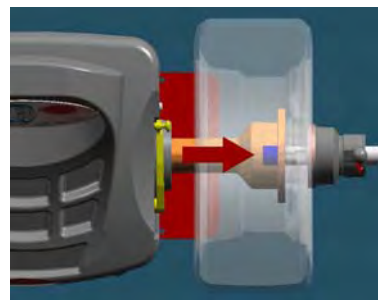
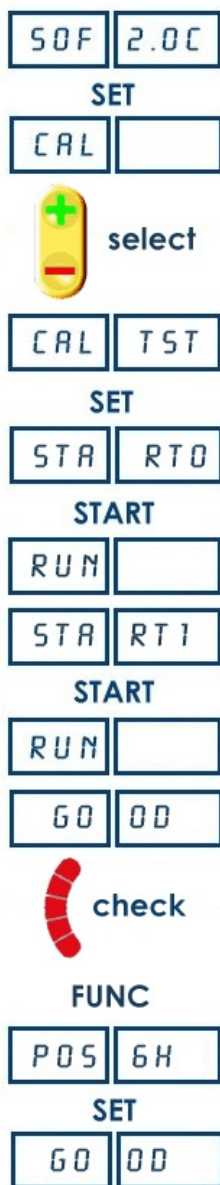


FIG. 11

End of calibration.

Press **<MODE/ESC>** to return to normal
balancing mode.

4.2 How to check the calibration of Wheel Balancer



Press <+/-> to select CAL TEST

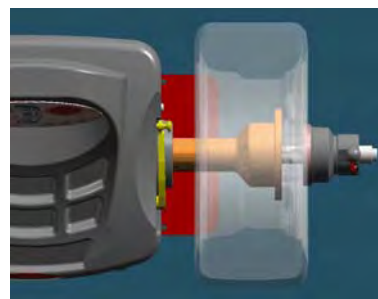


FIG. 13

Place a wheel on the flange (Fig. 13).

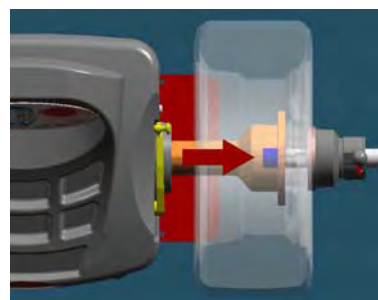


FIG. 14

Put the calibration weight (Fig. 14).

Press <FINE> to see actual values. 160-0 (± 3) is correct result.

When all LED (left side) are lit, calibration weight must be at exactly 6 o'clock. If no, press <FUNC> to calibrate position.

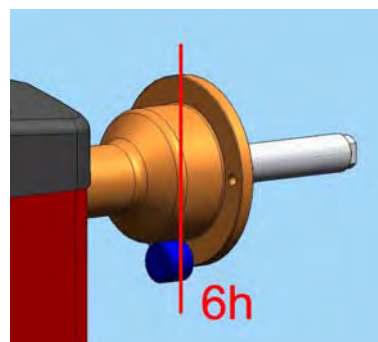


FIG. 15

Turn the wheel until the calibration weight is located at 6 o'clock.

Press <SET> to calibrate.

Press <MODE/ESC> to return to normal balancing mode.

5 MEASUREMENT AND CORRECTION OF UNBALANCE

5.1 Placing the wheel rim on the wheel balancer

- 5.1.1 Select the cone or flange suitable for the wheel to be balanced. Specific mounting instructions are delivered with each flange.



NOTE *The operation of centering and tightening of the wheel on the flanges is of basic importance for correct balancing. Good results depend on proper performance of these procedures.
Clean accurately all cones, shaft and adapter surface before placing the wheel on the wheel balancer.*



CAUTION *Always make sure flanges are correctly locked on the motor shaft and wheel is correctly locked on the flange being used.*

5.2 How to compensate unbalance of flanges using AFC function (optional for B212)



NOTE *This operation allows to put compensate unbalance of flange and other accessories.*

- 5.2.1 Lock the required flange on the shaft without the wheel.

HOW TO TURN ON AFC FUNCTION



The AFC led blinking.

The AFC led is on.

HOW TO TURN OFF AFC FUNCTION



Remove the flange.

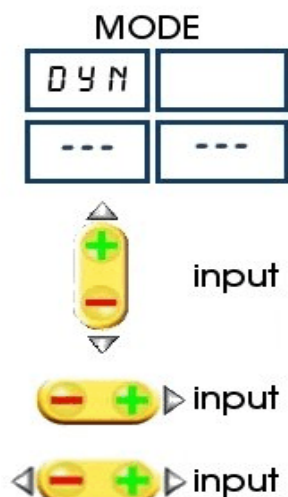
The AFC led switch off.

5.3 Input of Rim Dimensions



NOTE *DOUBLE OPERATOR option (optional for B212): this wheel balancer can be used by 2 operators in the same time. Everyone can memorizes the dimensions of the wheel to balance with <OPER> button. The machine memorizes the operating procedure too.*

5.3.1 DYNAMIC MODE



Press **MODE** to select the operating mode.

Select the wheel diameter.

Select the distance of the wheel.(Fig. 19, Fig.20)

Select the wheel width.

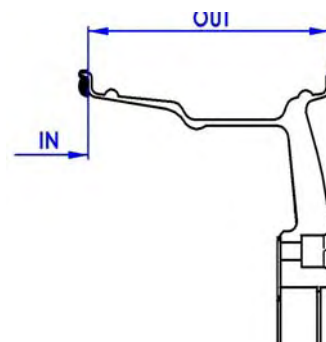
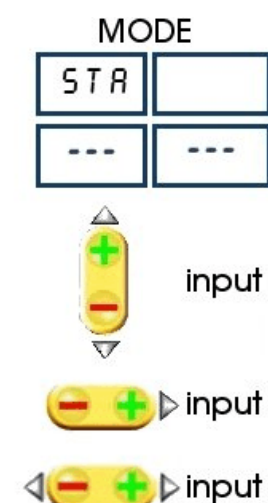


FIG. 19: DYNAMIC



FIG. 20: Rod positioning for distance measurement.

5.3.2 STATIC MODE



Press **MODE** to select the operating mode.

Select the diameter.

Select the distance.

Select the width.

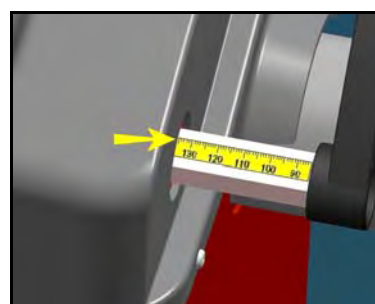
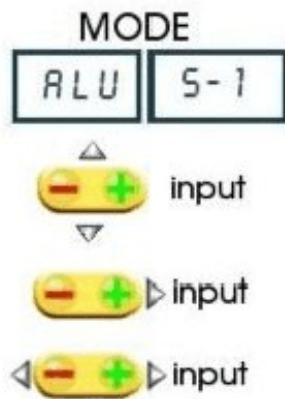


FIG. 22: Reading distance gauge.

5.3.3 ALU S-1 MODE / ALU S-2 MODE (Manual input)



Press **MODE** to select the operating mode. (Fig. 23, Fig. 24).

Select the wheel diameter.

Insert the internal measure (IN 1) (Fig. 20, Fig.22).

Insert the external measure (IN 2) (Fig.28, Fig.22)

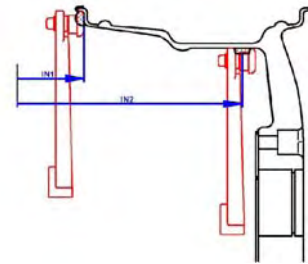


Fig. 23 ALU S-1

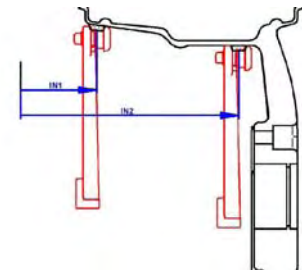


Fig. 23: ALU S-2

5.3.4 ALU S-1 MODE / ALU S-2 MODE (Automatic input - optional)



Press **MODE** to select the operating mode (Fig. 23, Fig.24)

Press **<DISTANCE -/+>** to start measurement.

Insert the internal measure (Fig. 27).
Wait for the BEEP.

Insert the external measure (Fig. 28).
Wait for the BEEP.

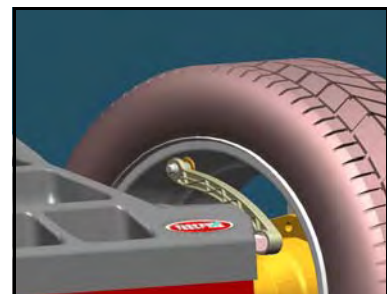


Fig. 27



Fig. 28

5.4 Detecting and correcting unbalance

5.4.1 After setting wheel dimensions, press **<START>** or close the safety cover (optional) to spin the wheel and start the measurement run.



CAUTION

Wheel start automatically when safety cover is closed.

5.4.2 At the end of the spin the wheel will brake automatically and the display will show the weight position and weight requirement to correct the wheel's unbalance.

5.4.3 If unbalance shown is 0, press **<FINE>** to show residual unbalance.

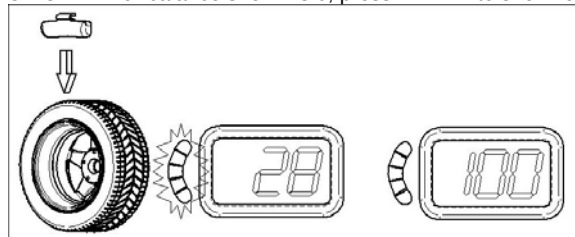


FIG. 29: inside weight indication

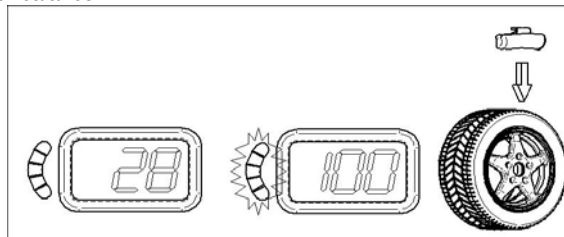


FIG. 30: outside weight indication



NOTE

OPT light blinking after the measurement indicates that static unbalance is exceeding more than 20grs. Optimization procedure is suggested.

5.5 How to apply the weight using ALU-SE indicator



Place the weight (Fig. 32).

Turn the wheel to the position (Fig. 29, Fig. 30).

Move the rod until **≡≡≡** appears on the display (picture on the left).

Apply the weight (Fig. 33).



FIG. 32

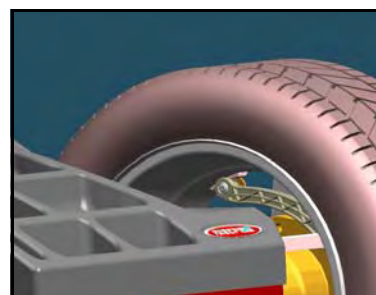


FIG. 33

6 HOW TO OPTIMIZE UNBALANCE OF THE WHEEL

- 6.1 Measure the unbalance of the rim only. Once the measurement of rim unbalance is calculated, press **<FUNC>** to enter optimization function.



Mount the tyre on the rim. After mounting the tyre, the wheel must be put on the shaft in the same position as before.

Left display (20 in example) indicates present static unbalance. Right display (55% in example) indicates possible reduction of weight in %.

Turn the wheel until SIGN 1 is displayed.

Mark the rim (12 o'clock).

Turn the wheel until SIGN 2 is displayed.

Mark the tyre (12 o'clock).

Put the two marks together to optimize unbalance.

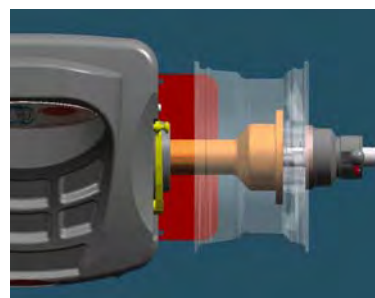


FIG. 35: First spin, rim only

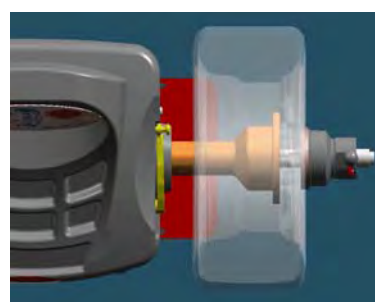


FIG. 36: second spin, complete wheel

- 6.2 After pressing **<SET>**, the program return to the measurement of unbalance mode, where an indication of the residual unbalance values will be given.

7 HOW TO USE SPLIT WEIGHT FUNCTION

- 7.1 Measure the unbalance of the wheel. Once the measurement of unbalance is calculated, press **<FUNC>** to enter split function.



Turn the wheel until POS 1 is displayed.

Mark the tyre when the first spoke selected is at 12 o'clock.

Turn the wheel until POS 2 is displayed.

Mark the tyre when the second spoke selected is at 12 o'clock.

- 7.2 The weight in grams for external side is displayed only when the wheel is in a correct position (12 o'clock).

8 SPECIAL FUNCTIONS MENU

8.1 Enter in the special functions menu

Switch on the wheel balancer. Press **<SET>** before SOF X.XX will disappear.

CAL	Calibration of wheel balancer
CAL tSt	Control of the calibration of electronic sensors
CAL r od	Calibration of electronic input sensors
SEn So r	Diagnostic of sensors
StA tiS	Statistic about the use of machine
USr Set	User setup
tEc Set	Technical Setup
Ser nuM	Serial number
Act Cod	Inserting Activation Codes

8.2 Diagnostic program of sensors

Switch on the wheel balancer. Press **<SET>** before SOF X.XX will disappear. Select **Sen So r** and press **<SET>**.

r PM	Balancing speed
PS1	PS1 voltage
PS2	PS2 voltage
tO	Encoder is in the zero position
Pos	Angle of position sensor(from 0 to 255)
dIS	Value of distance sensor
dIA	Value of diameter sensor
OUT	Value of width sensor
Cou	Safety cover is open or closed
PED	Air pedal (only PL version)
AIR	Pressure guage (only PL version)

8.3 Statistic program

Switch on the wheel balancer. Press **<SET>** before SOF X.XX will disappear. Select **St a ti s** and press **<SET>**.

tOt	Total number of spin
SUC	Percent of runs with a good result
c11 0s	Percent of wheels with diameter <11"
from 11 to 17	Percent of wheels with the indicated diameter
]17 0s	Percent of wheels with diameter >17"
CAL	Number of calibrations
p ne	Number of PL test (only PL version)

8.4 User Setup

Switch on the wheel balancer. Press **<SET>** before SOF X.XX will disappear. Select **USa SET** and press **<SET>**.

ScA LE	Set 1 or 5 grams step (0.05/0.25 ounces).
Cut oFF	Set minimum weight to be displayed.
Uni Out	Unit of measure for the width (0=inch, 1=millimeters).
Uni Umb	Unit of measure for the weight (0= grams, 1=once).
Fin AL	Display of final (0 = normal, 1 = blink, 2= Go OD).
biP	Enable/Disable beep in position.
EME StP	Motor brakes in case of emergency stop (O n or OFF) (OFF: motor power is cut).
Cou Er	OFF = safety cover is not installed; O n = the motor starts only if the safety cover is closed; A u t = closing of safety cover the motor starts automatically.
r od in	Enable/Disable distance input system.
r od out	Enable/Disable width input system.
STE P	Increase distance/width measure.
PNE U	Enable/Disable PL system.
SCR EEN	Screen saver selection from 1 to 5 (0 = disable).
VOI CE	Enable/Disable voice system.
Sn r	Sensibility to external vibration.
Tim er	Input system speed.
Fas t	Enable/Disable fast cycle.
APS	Enable/Disable automatic position system.
ADM IN	Enable/Disable Admin mode.
OPT	Set minimum tire matching level.
rES Et	Load Factory Setup.

APPENDIX

A: Technical Data

Absorbed power	60W								
Speed Balancing	98RPM								
Measuring time	4-15 seconds								
Precision	±1grs (±1/28 ounce)								
Wheel dimensions	<table> <tr> <td>Rim Diameter</td><td>from 8" (200mm) to 26" (650mm)</td></tr> <tr> <td>Wheel Diameter (m ax, with cover)</td><td>34" (850mm)</td></tr> <tr> <td>Rim Width (max, with cover)</td><td>16" (410mm)</td></tr> <tr> <td>Wheel Weight (max)</td><td>70Kg (155Lbs)</td></tr> </table>	Rim Diameter	from 8" (200mm) to 26" (650mm)	Wheel Diameter (m ax, with cover)	34" (850mm)	Rim Width (max, with cover)	16" (410mm)	Wheel Weight (max)	70Kg (155Lbs)
Rim Diameter	from 8" (200mm) to 26" (650mm)								
Wheel Diameter (m ax, with cover)	34" (850mm)								
Rim Width (max, with cover)	16" (410mm)								
Wheel Weight (max)	70Kg (155Lbs)								

Wheel balancer dimensions

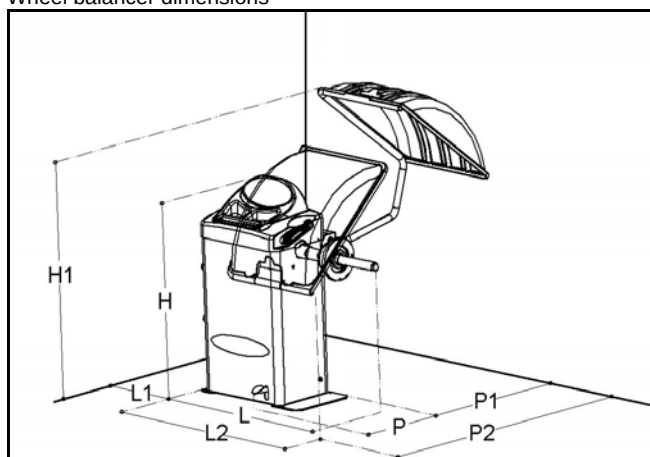


FIG. 38: Balatron 212/221 measures

	B221	B212
L (mm)	1100	1030
L1 (mm)	500	500
L2 (mm)	1150	1080
P (mm)	510	430
P1 (mm)	550	550
P2 (mm)	1250	1250
H (mm)	990	940
H1 (mm)	1400	1400
Peso (kg)	72	70

B: Environmental Data, Safety Features and Requirements

Environmental Data

[Operating conditions]

This unit is designed for indoor use only.

Temperature: 0 to 45°C

Relative Humidity: 5 to 80% a 40°

[Storage conditions]

Package is designed for indoor storage only.

Temperature: -25° to 70°C

Relative humidity: 5 at 95% to 40°C

Safety Features

1. The Balance Weights Holder may be removed for servicing. It is secured to the machine body through screws so that only voluntarily it may be removed. Removal of this protection is therefore restricted to Authorized Service Engineers.
2. The Control Panel may be removed for servicing. It is secured to the machine body through screws so that only voluntarily it may be removed. Removal of this protection is therefore restricted to Authorized Service Engineers.



WARNING

FASEP 2000 srl shall not be responsible for any inconvenience, breakdown, accidents caused directly or indirectly by unauthorized service. Service to any parts by unauthorized engineers will void warranty and will any right of the owner of the unit.



NOTE

As this unit runs at a speed below 100rpm, a safety cover is not required. However a safety cover is recommended when balancing wheels with diameter bigger than 20".



CAUTION

The safety cover is anyway required when using the motorcycle adapter.

General Safety Requirement

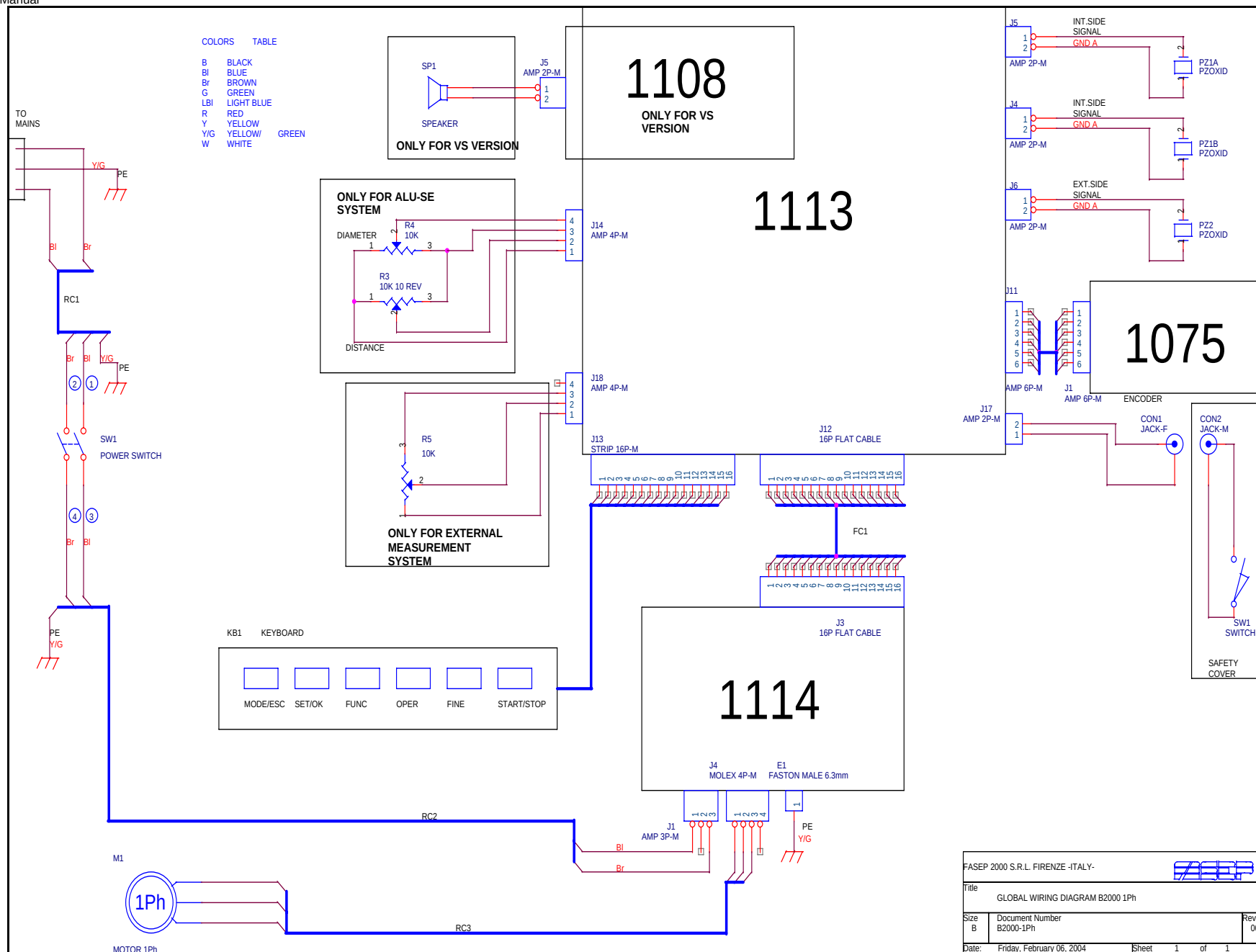
[before using/servicing this unit]

1. Read this instruction manual before operating or servicing the wheel balancer.
2. Make sure electrical power source conforms to requirements shown on nameplate (see also model identification chart for reference).
3. Make sure the unit has a stable position and it's bolted to the ground.
[when using the unit]
4. Protect power leading to the unit from damage.
5. When work area is being washed, make sure unit is adequately protected.
6. Remove all stones and mud lodged in tire treads before balancing the wheel.
7. Do not touch spinning wheel.
8. Make sure counterweights are securely attached before checking residual unbalance.
[when servicing the unit]
9. Make sure power sources are disconnected before service on the unit is performed.
10. Service to PCB, electrical and mechanical parts should be done only by an Authorized FASEP 2000 Service Center.

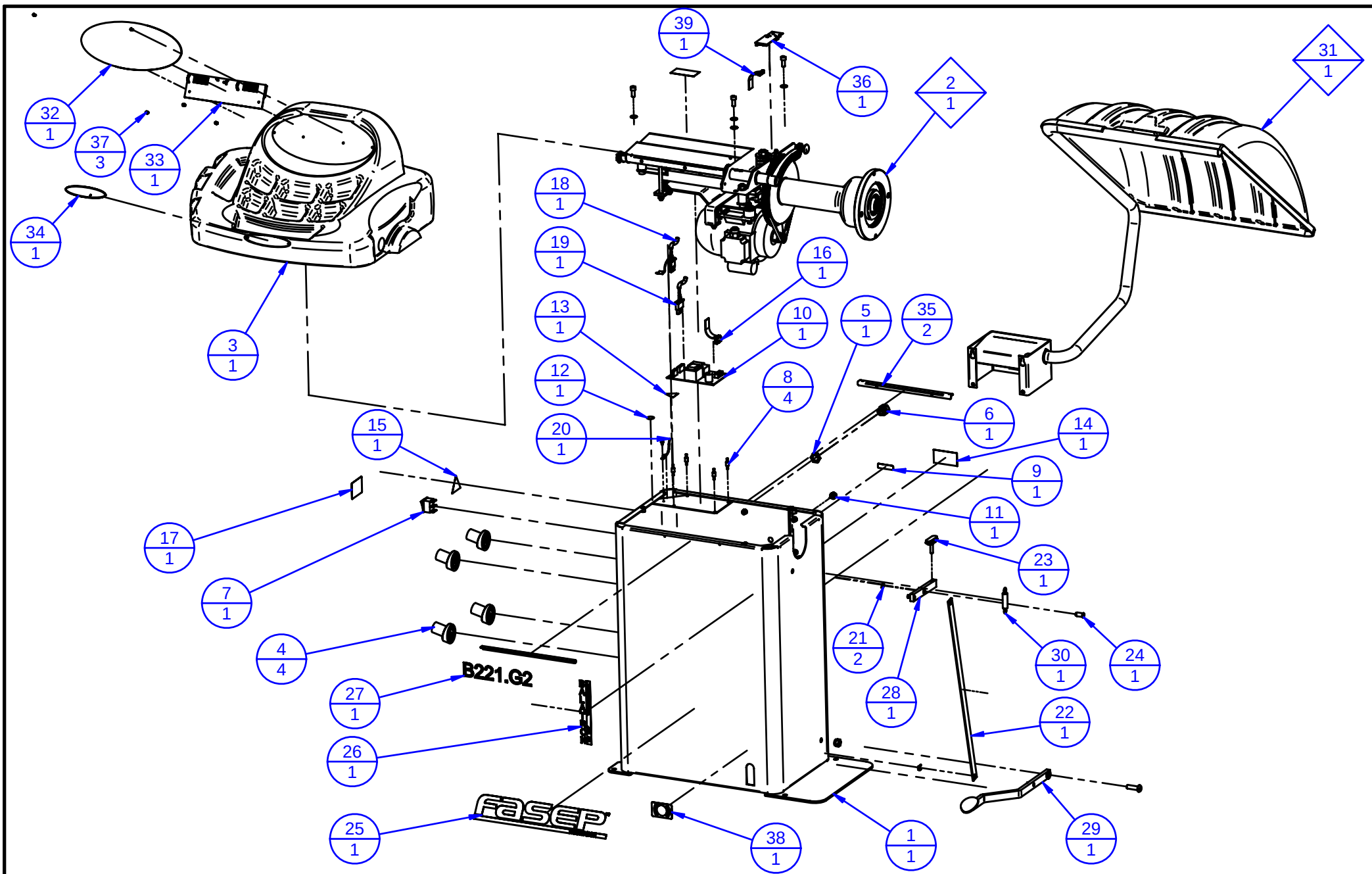
C: Errors and Malfunctions recognized by the Computer

Errors may apply to some model only.

- | | |
|---|---|
| ERR 1: Shaft does not rotate | ERR 16: Calibration memory error |
| ERR 2: Rotation Direction is wrong | ERR 17: Rod in uncorrected position |
| ERR 3: Rotation speed is not ready | ERR 18: Excessive weight detected |
| ERR 4: Rotation speed is wrong (too low or too high) | ERR 19: Reserved |
| ERR 5: Position Sensor or Position Disk failure | ERR 20: Excessive Deceleration |
| ERR 6: Safety Safety cover is open | ERR 21: Error in inputting data |
| ERR 7: Measuring cycle was interrupted | ERR 22: Brake error |
| ERR 8: Calibration weight was not inserted. | ERR 23: Reserved |
| ERR 9: Activation code not correct | ERR 24: Insufficient air pressure (PL version) |
| ERR 10: Overflow in calculations | ERR 25: Reserved |
| ERR 11: Serial number is wrong | ERR 26: Piezo sensor error |
| ERR 12: Serial number not inserted | ERR 27: Wheel is not securely tightened on the shaft |
| ERR 13: Reserved | ERR 28: Laser error |
| ERR 14: Uncorrected password | ERR 29: Reserved |
| ERR 15: E ² prom error | |



FASEP 2000 S.R.L. FIRENZE -ITALY-		
Title GLOBAL WIRING DIAGRAM B2000 1Ph		
Size B	Document Number B2000-1Ph	Rev 00
Date: Friday, February 06, 2004	Sheet 1	of 1



Legenda:

 Ref. number
 Q.ty

 Sub-table exists

Codice (Code):

E543.xxx

Descrizione / Description:

Equilibratrice B221.G2
 BALATRON Model B221.G2

Rev:

R1

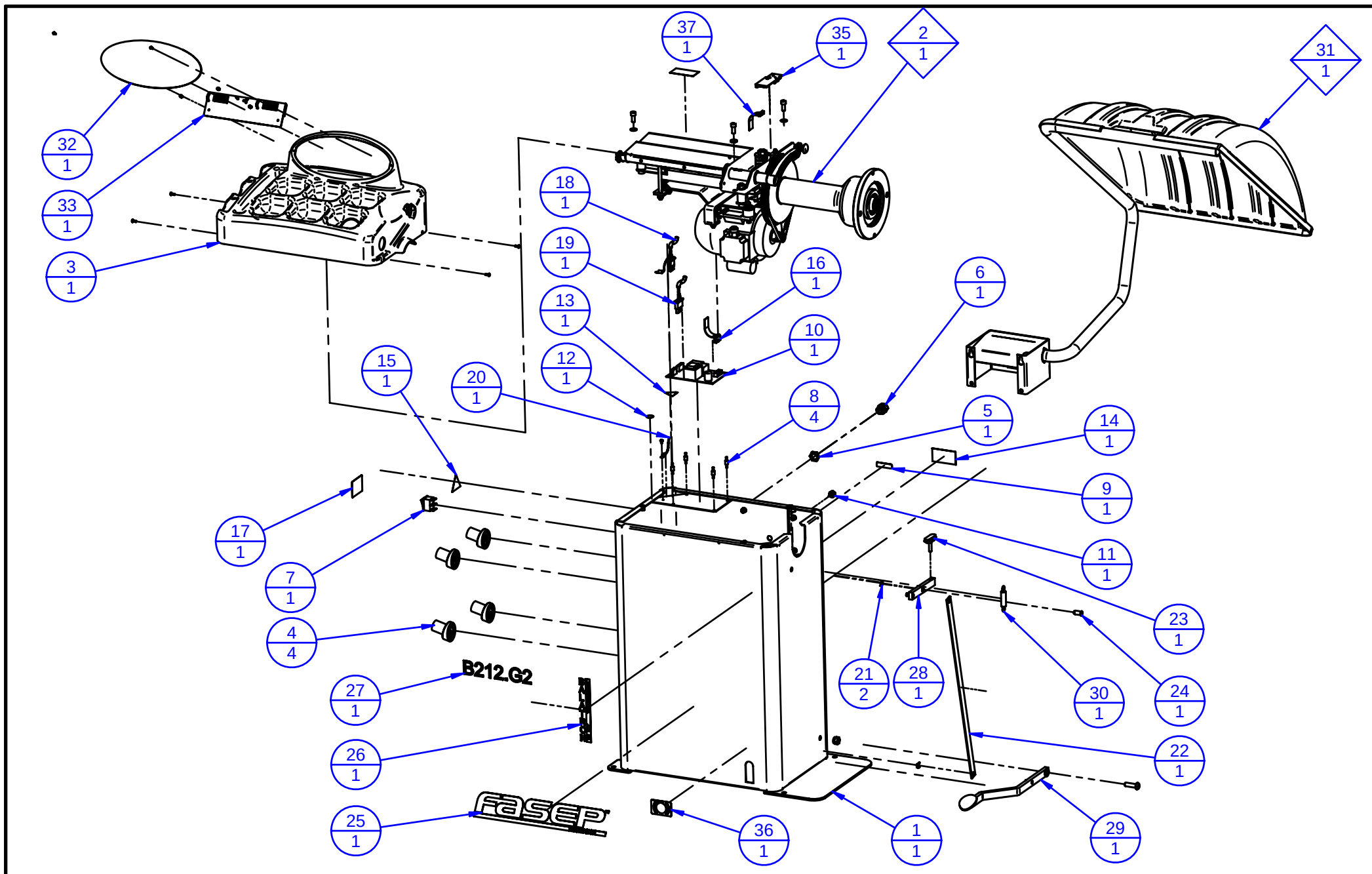
Data (Date):

09/07/07


 FASEP 2000 s.r.l. Ronta - Firenze - Italy

POS	RSP	Codice (Code)	Descrizione	Description	Q.tà (Q.ty)
1		4M2800	Basamento equilibratrice B2000	Base	1
2		3M691	Gruppo Oscillante LS x B2xx.G2	B2xx.G2 Motor Assy	1
3		2M2829	Coperchio con vaschette x B221	Cover	1
4		2M0160	Nasello Porta-flangia	Flange Holder	4
5		9E2198	Controdado PG11	Nut	1
6		9E0810	Passacavo PG11	Wire tightener	1
7		9E3056	Interruttore bipolare	Switch	1
8		9E2516	Distanziale blocca scheda corto	Spacer	4
9		2M2887	Etichetta Switch Carter B2xx	Carter Sticker	1
10	x	3ES486-2	Scheda 1114 Potenza B2000 98rpm	1114 board (B2000 98 RPM)	1
11		3EC551	Cavo 1141_1137-Switch Carter	1141-Switch Cable	1
12		9M2475	Etichetta normata PE	PE Sticker	1
13		9M2345	Etichetta 220V	220V Sticker	1
14		2M1632	Etichetta alimentazione 220V 50Hz 1Ph	Sticker	1
15		9M2476	Etichetta alta tensione normata	Sticker	1
16		3EC548-1	Cavo piatto 1141-1114 x B2xx.G2	Flat Cable	1
17		2M2247	Targhetta Matricola CE	S/N Sticker	1
18		3EC544	Cavo Alimentazione B2xx	Cable	1
19		3EC489	Cavo Motore B2xx	Motor Cable	1
20		3EC420	Cavo terra scheda-basamento	Cable	1
21		9M2499	Anello d'arresto 8SXN09	Ring	2
22		4M2825	Tirante freno	Tension Rod	1
23		9M2826	Zoccolino freno	Brake	1
24		4M2856	Perno x freno B221	Brake Pin	1
25		2M3335	Presp. FASEP S.1969 410x74 Bianco	FASEP Sticker	1
26		2M2820	Presp. Balatron 16 Bit Technology	BALATRON Sticker	1
27		2M3368	Presp. B221.G2	B221.G2 Sticker	1
28		4M2824	Supporto freno	Brake Support	1
29		4M2821	Pedale Freno x B2xx	Brake Pedal	1
30		9M2876	Molla TR38	Spring	1
31		3M563	Gruppo Carter Copriruota B2xx	Safety Cover Assy	1
32		2M2802	Pannello B2000	Electronic panel	1
33	x	3ES541	Scheda 1141	1141 Board	1

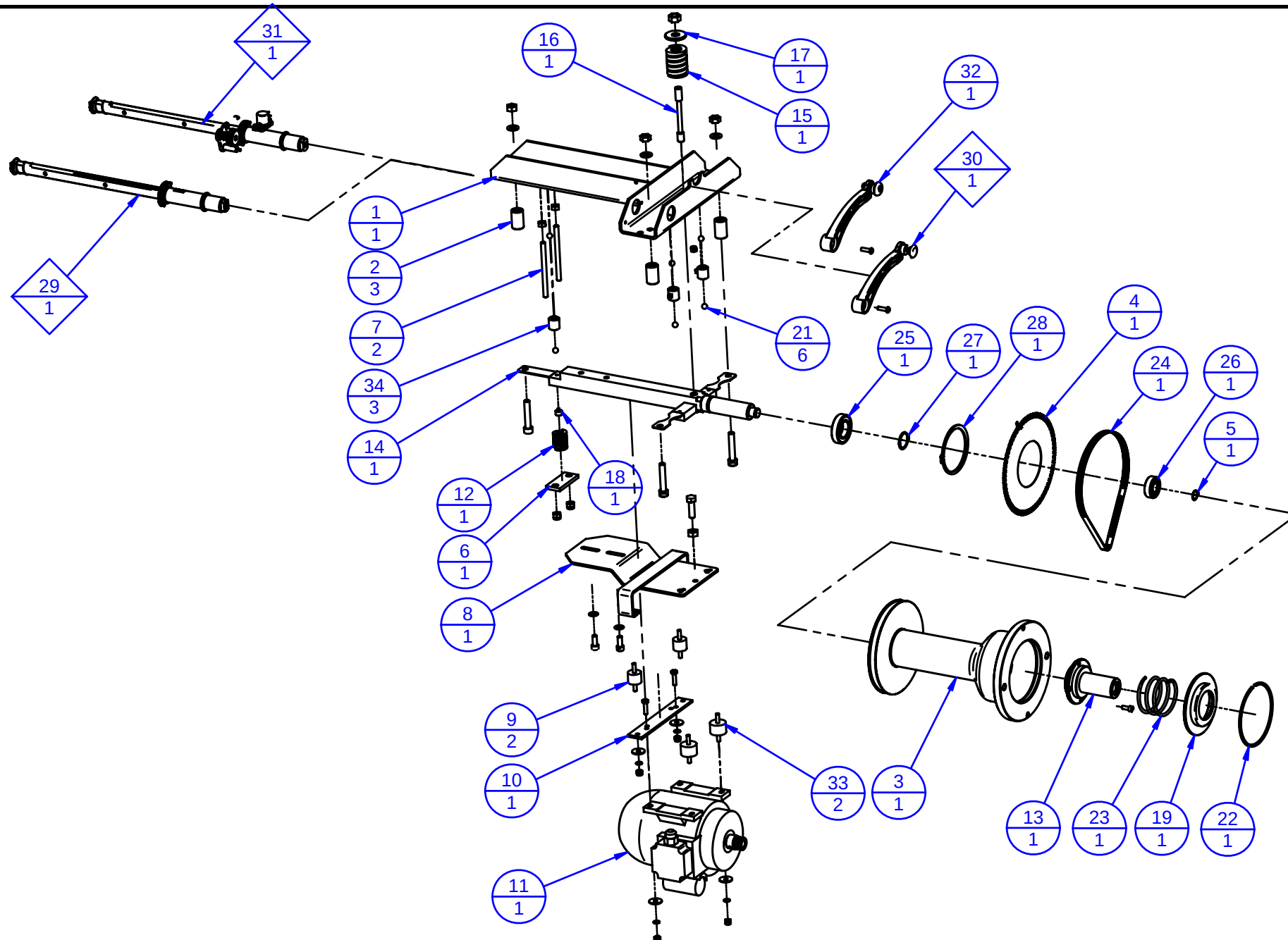
POS	RSP	Codice (Code)	Descrizione	Description	Q.tà (Q.ty)
34		2M3381	Etichetta FASEP MI 121x28 Resinata	3D Sticker	1
35		4M3018	Squadretta fissaggio coperchio B221	Support Cover	2
36	x	3ES524-2	Scheda 1140-02 Matroc 50Hz	1140-02 Board	1
37		2M2253	Distanziale 6x4x4.6 ottone	Spacer	3
38		2M2323	Etichetta Freno	Brake Sticker	1
39		3EC549-1	Cavo 1141-1140 x B2xx.G2	Flat Cable	1



Legenda: 2 1 Ref. number Sub-table exists		Codice (Code): E544.xxx	Descrizione / Description: Equilibratrice B212.G2 BALATRON Model B212.G2	Rev: R1	Data (Date): 09/07/07	 FASEP 2000 s.r.l. Ronta - Firenze - Italy
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POS	RSP	Codice (Code)	Descrizione	Description	Q.tà (Q.ty)
1		4M2800	Basamento equilibratrice B2000	Base	1
2		3M691	Gruppo Oscillante LS x B2xx.G2	B2xx.G2 Motor Assy	1
3		2M3158	Coperchio con vaschette in ABS x B212	ABS Cover	1
4		2M0160	Nasello Porta-flangia	Flange Holder	4
5		9E2198	Controdado PG11	Nut	1
6		9E0810	Passacavo PG11	Wire tightener	1
7		9E3056	Interruttore bipolare	Switch	1
8		9E2516	Distanziale blocca scheda corto	Spacer	4
9		2M2887	Etichetta Switch Carter B2xx	Carter Sticker	1
10	x	3ES486-2	Scheda 1114 Potenza B2000 98rpm	1114 board (B2000 98 RPM)	1
11		3EC551	Cavo 1141_1137-Switch Carter	1141-Switch Cable	1
12		9M2475	Etichetta normata PE	PE Sticker	1
13		9M2345	Etichetta 220V	220V Sticker	1
14		2M1632	Etichetta alimentazione 220V 50Hz 1Ph	Sticker	1
15		9M2476	Etichetta alta tensione normata	Sticker	1
16		3EC548-1	Cavo piatto 1141-1114 x B2xx.G2	Flat Cable	1
17		2M2247	Targhetta Matricola CE	S/N Sticker	1
18		3EC544	Cavo Alimentazione B2xx	Cable	1
19		3EC489	Cavo Motore B2xx	Motor Cable	1
20		3EC420	Cavo terra scheda-basamento	Cable	1
21		9M2499	Anello d'arresto 8SXN09	Ring	2
22		4M2825	Tirante freno	Tension Rod	1
23		9M2826	Zoccolino freno	Brake	1
24		4M2856	Perno x freno B221	Brake Pin	1
25		2M3335	Presp. FASEP S.1969 410x74 Bianco	FASEP Sticker	1
26		2M2820	Presp. Balatron 16 Bit Technology	BALATRON Sticker	1
27		2M3367	Presp. B212.G2	B212.G2 Sticker	1
28		4M2824	Supporto freno	Brake Support	1
29		4M2821	Pedale Freno x B2xx	Brake Pedal	1
30		9M2876	Molla TR38	Spring	1
31		3M563	Gruppo Carter Copriruota B2xx	Safety Cover Assy	1
32		2M2802	Pannello B2000	Electronic panel	1

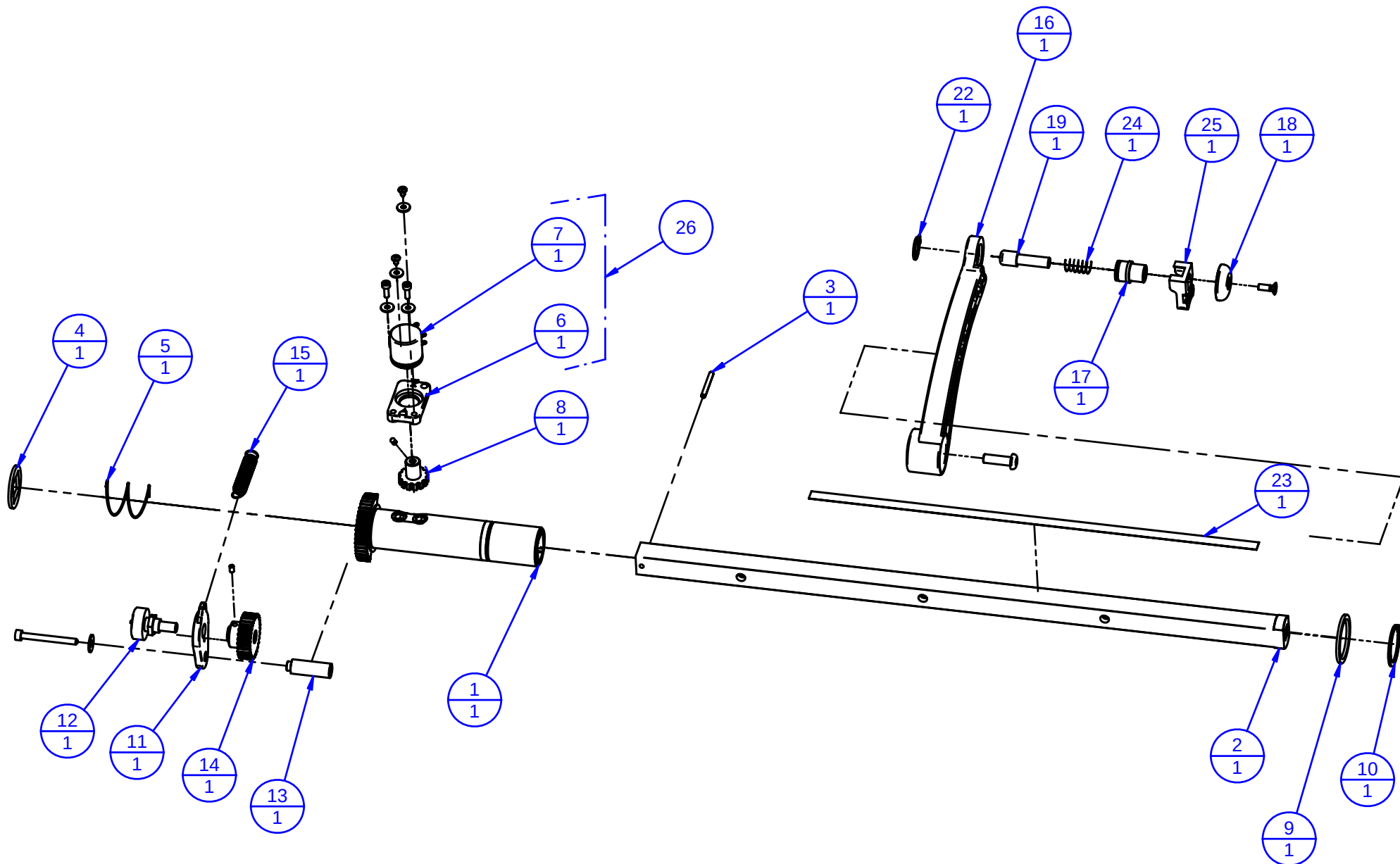
POS	RSP	Codice (Code)	Descrizione	Description	Q.tà (Q.ty)
33	x	3ES541	Scheda 1141	1141 Board	1
35	x	3ES524-2	Scheda 1140-02 Matroc 50Hz	1140-02 Board	1
36		2M2323	Etichetta Freno	Brake Sticker	1
37		3EC549-1	Cavo 1141-1140 x B2xx.G2	Flat Cable	1



Legenda:		Codice (Code):	Descrizione / Description:	Rev:	Data (Date):	 FASEP 2000 s.r.l. Ronta - Firenze - Italy
2 1 Ref. number Q.ty	Sub-table exists	3M691	Gruppo Oscillante LS x B2xx.G2 B2xx.G2 Motor Assy	R1	13/06/07	

POS	RSP	Codice (Code)	Descrizione	Description	Q.tà (Q.ty)
1		4M2770	Controtelaio x gruppo LS	Frame	1
2		4M2771	Distanziale	Spacer	3
3		4M2809	Campana per B2xx	B2000 Bell	1
4		2M2256	Disco ricerca ø194x64T	Position disk	1
5		9V000099	ANELLO DI ARRESTO , Ø 17E	Seeger Ring	1
6		4M2813	Traversino	Support	1
7		4M1004	Barra Filettata M8x112	Pool	2
8		4M2811	Supporto Motore Universale	Motor support	1
9		9M1946	Puffer 25.20 M6	Vibration Dampers	2
10		4M2812	Piastrina Motore	Plate	1
11		3M2810	Motore + puleggia TB2	Motor + Pulley	1
12		9M1204	Molla G26x32	Spring	1
13		4M2164	Attacco Flangiato HD	HD Support	1
14		4M2763	Albero Centrale gruppo LS	Central shaft	1
15		9M2263	Molla G40x51	Spring	1
16		2M2320	Tirante sfinato per HD	Pool	1
17		2M2264	Scodellino per molla G40	Flange	1
18		4M2857	Boccolo richiamo x molla	Pin	1
19		2M2141	Disco premi-molla	Disk	1
21		9C1016	Sfera 3/8"	Ball	6
22		9V093042	Seeger ø118I senza becchi	Seeger Ring	1
23		2M1849	Molla a compressione ø67x110x4.5	Spring	1
24	x	9M2839-1	Cinghia TB2 630 6 Nerv.	Belt	1
25		9C0030	CUSCINETTO ø30xø55 x13 6006 ZZ	Ball bearing	1
26		9C0029	CUSCINETTO ø17xø40x12 6203-2Z	Ball bearing	1
27		9V094019	Anello Seeger ø30 E	Seeger Ring	1
28		9V094048	ANELLO DI ARRESTO Ø88 E	Seeger Ring	1
29		3M537	Gruppo misura Alu-s non sensorizzato	Not sensorized ALU-S system	1
30		3M2573	Tastatore ALU-S	ALU-S Distance gauge	1
31		3M648	Gruppo ALU-S.2005 sens. completo	ALU-SE Measuring System Assy	1
32		3M2573-1	Braccetto tastatore mobile completo	ALU-S Distance measuring rod	1
33		9M3198	Puffer 30.20 M6x18	Vibration Damper	2
34	x	3EV556	Sensore PIEZOXID MATROC 2007	Piezo Sensor	3
35*		2M2268-1	Striscia numerata bandierina (90-390)	Scale	1

RSP = Parti di ricambio consigliate - (Recommended Spare Parts)



Legenda:

 Ref. number
 Q.ty

 Sub-table exists

Codice (Code):

3M648 + 3M2573-2

Descrizione / Description:

Gruppo misura ALU-SE 2008
 ALU-SE Measuring System Assy 2008

Rev:

R0

Data (Date):

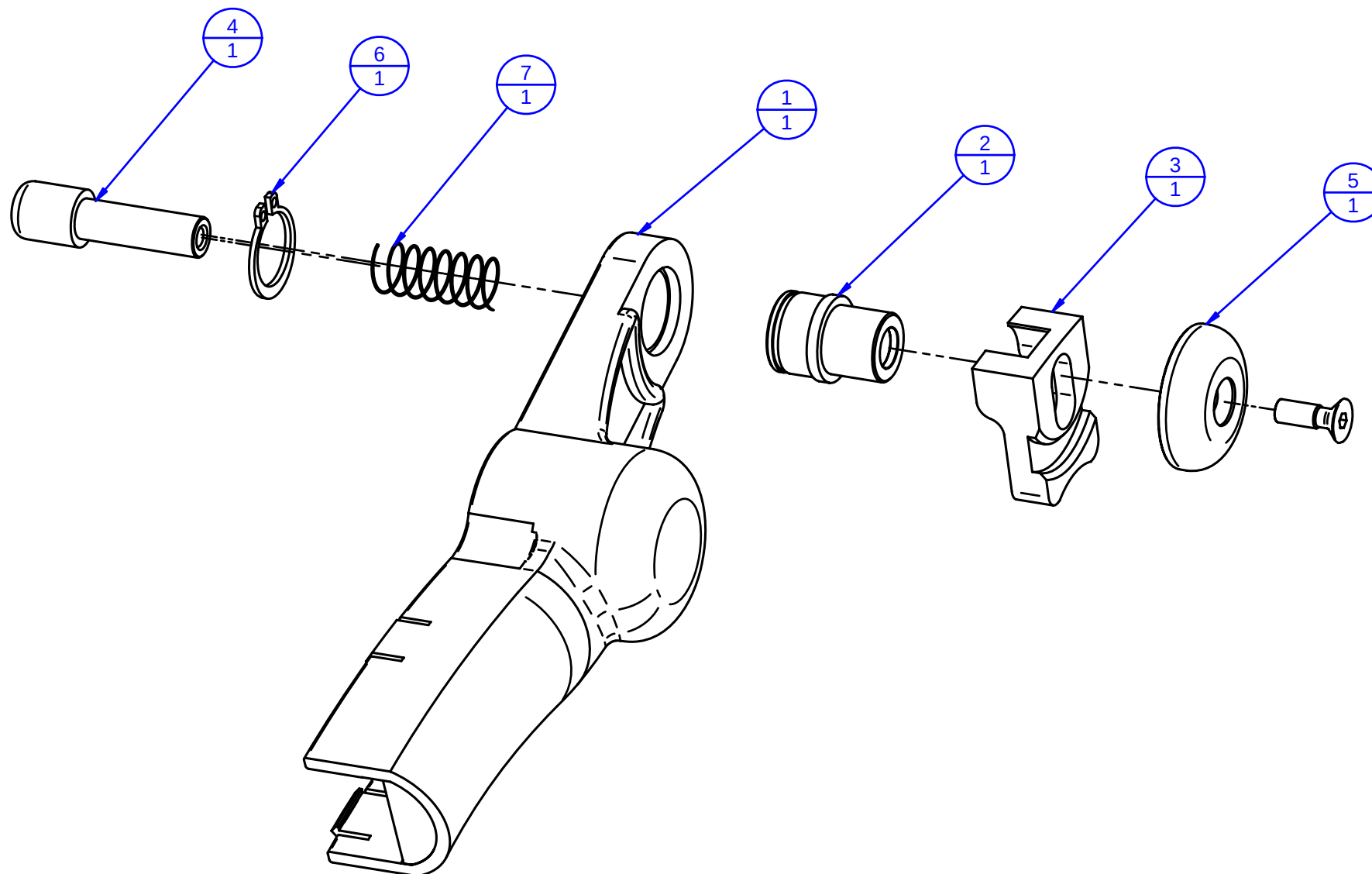
25/02/08

FASEP

FASEP 2000 s.r.l.

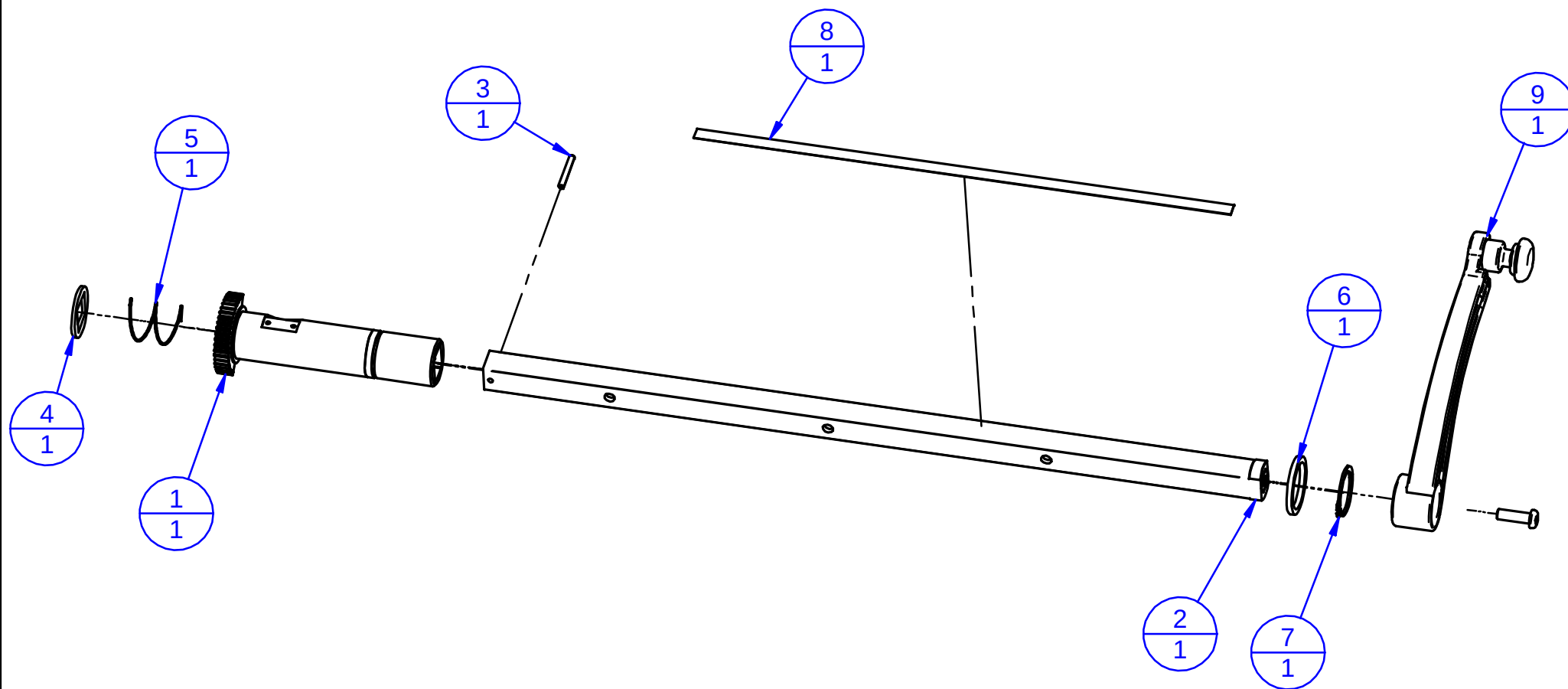
Ronta - Firenze - Italy

POS	RSP	Codice (Code)	Descrizione	Description	Q.tà (Q.ty)
1		2M2509	Corpo per ALU-S	ALU-S Body	1
2		2M2510	Asta scorrevole x ALU-S	Sliding rod	1
3		9V088024	Spina elastica ø3x26	Spring Pin	1
4		2M2646	Disco ritegno molla ALU-S	Stop Washer disk	1
5		2M2645	Molla a compressione De24 d1 NT30 Lo450	Spring	1
6		2M3276	Supporto potenz. dist. Alu-s	Distance Pot holder	1
7	x	9E2800	Potenzimetro servo 534S103 10K	Servo Pot	1
8		2M2374	Puleggia dentata 13XL	Pulley	1
9		9V700019	Anello a spessore LMKAS d.35E	Ring	1
10		9V700018	Anello Seeger Ø 27E	Seeger Ring	1
11		2M3277	Supporto pot. diametro Alu-S	Diameter Pot holder	1
12	x	9E2786	Potenzimetro 157B103 10K	Pot	1
13		2M2643	Distanziale staffa Alu-s	Spacer	1
14		3M2639	Ingranaggio Z30 Completo	Gear	1
15		2M0962	Molla a Trazione ø9x50	Spring	1
16		2M2573	Braccetto bandierina ALU-S	Rod	1
17		2M3373	Camicia tastatore ALU-S (13-25)	Jacket for ALU-S rod	1
18		2M2611	Tastatore x Alu-s	ALU-S rod	1
19		2M3374	Pistoncino x tastatore Alu-s (13-25)	Piston	1
22		9V700044	Anello seeger ø14E	Seeger Ring	1
23		2M2268-1	Striscia numerata bandierina (90-390)	Scale	1
24		9M0885	Molla CO12 De9.3 d0.65 NT8 Lo22	Spring	1
25		2M3461	Blocchetto x estrazione piombo	Block	1
26*		3M2641	Sensore Distanza x ALU-S	Sensor Distance ALU-S	1



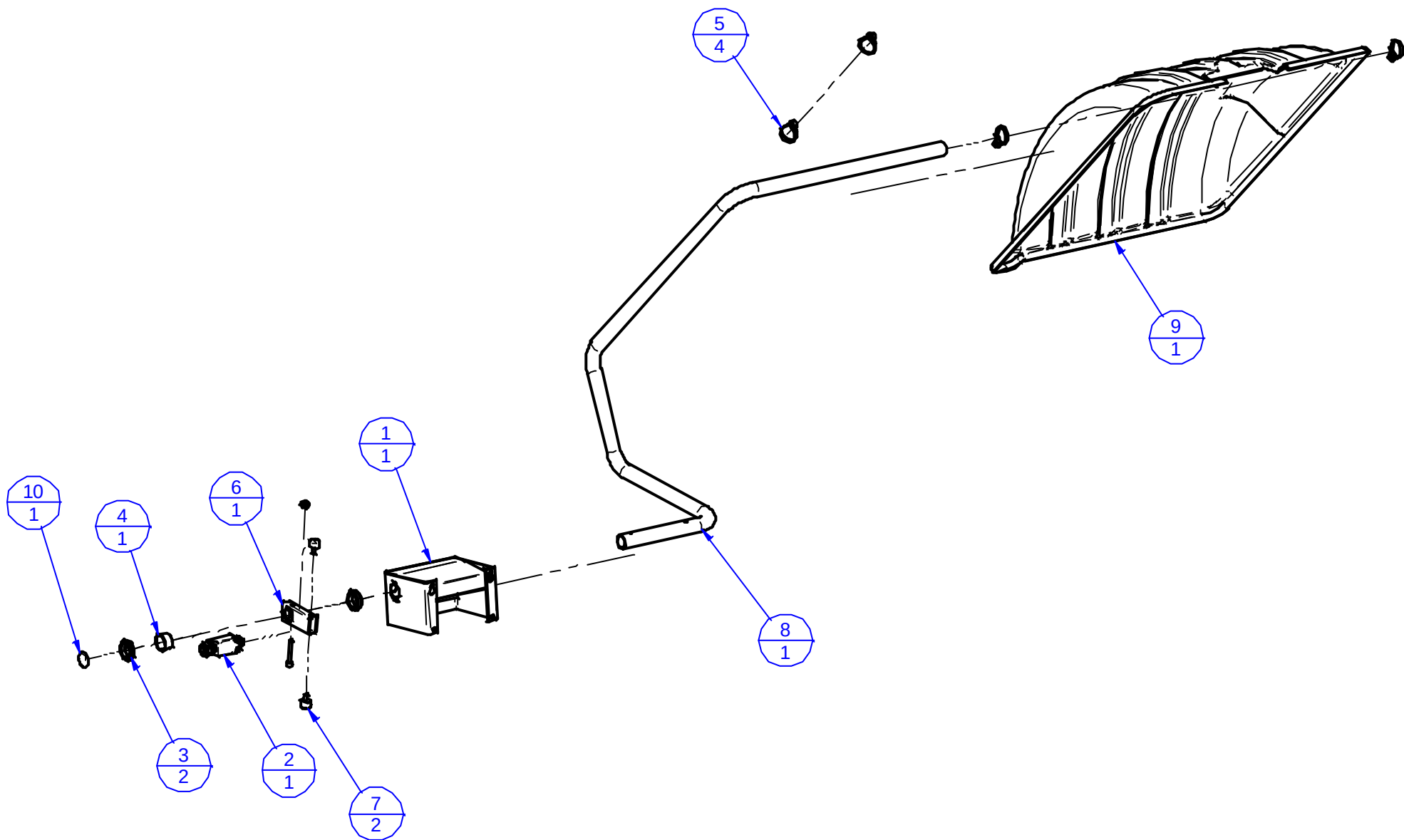
Legenda: Ref. number Q.ty Sub-table exists	Codice (Code): 3M3462	Descrizione / Description: Prolunga 24"-28" x braccetto ALU-S ALU-SE arm 28" extension	Rev: R0	Data (Date): 02/04/08	 FASEP FASEP 2000 s.r.l. Ronta - Firenze - Italy
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POS	RSP	Codice (Code)	Descrizione	Description	Q.tà (Q.ty)
1		2M3462	Prolunga ALU-S 24"÷28"	Extension	1
2		2M3373	Camicia tastatore ALU-S (13-25)	Jacket for ALU-S rod	1
3		2M3461	Blocchetto x estrazione piombo	Block	1
4		2M3374	Pistoncino x tastatore Alu-s (13-25)	Piston	1
5		2M2611	Tastatore x Alu-s	ALU-S rod	1
6		9V700044	Anello seeger ø14E	Seeger Ring	1
7		9M0885	Molla CO12 De9.3 d0.65 NT8 Lo22	Spring	1



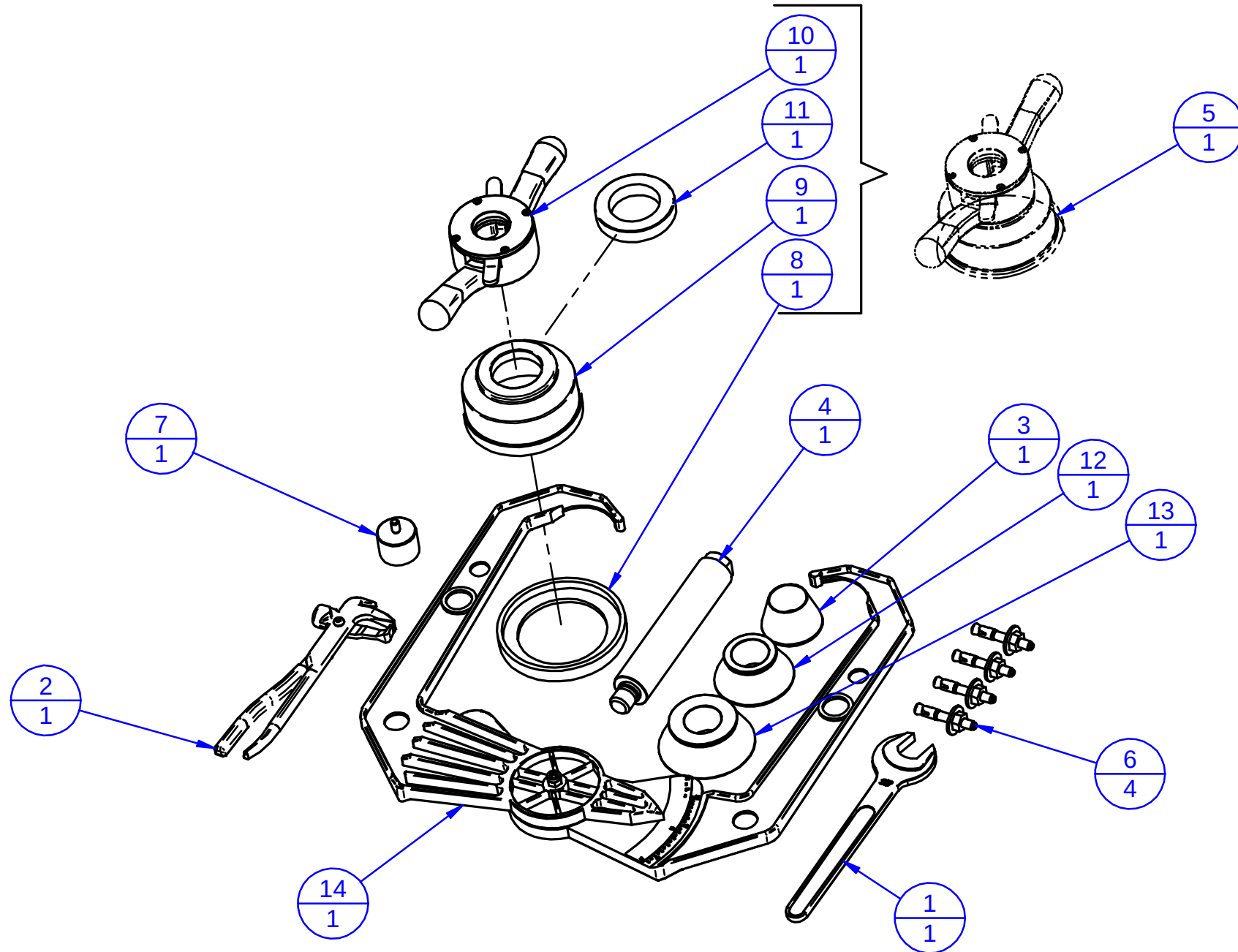
Legenda: 2 1 Ref. number Q.ty Sub-table exists	Codice (Code): 3M537 + 3M2573	Descrizione / Description: Gruppo misura ALU-S non sensorizzato ALU-S system	Rev: R1	Data (Date): 11/11/06	FASEP FASEP 2000 s.r.l. Ronta - Firenze - Italy
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POS	RSP	Codice (Code)	Descrizione	Description	Q.tà (Q.ty)
1		2M2509-1	Corpo per ALU-S (senza inserti)	ALU-S Body	1
2		2M2510-1	Asta Scorrevole ALU-S (senza an. Met)	Sliding Rod	1
3		9V088024	Spina elastica ø3x26	Spring Pin	1
4		2M2646	Disco ritegno molla ALU-S	Stop Washer disk	1
5		2M2645	Molla a compressione De24 d1 NT30 Lo450	Spring	1
6		9V700019	Anello a spessore LMKAS ø35 E	Ring	1
7		9V700018	Anello Seeger Ø 27E	Seeger Ring	1
8		2M2268-1	Striscia numerata bandierina (90-390)	Scale	1
9		3M2573	Tastatore ALU-S	ALU-S Distance gauge	1



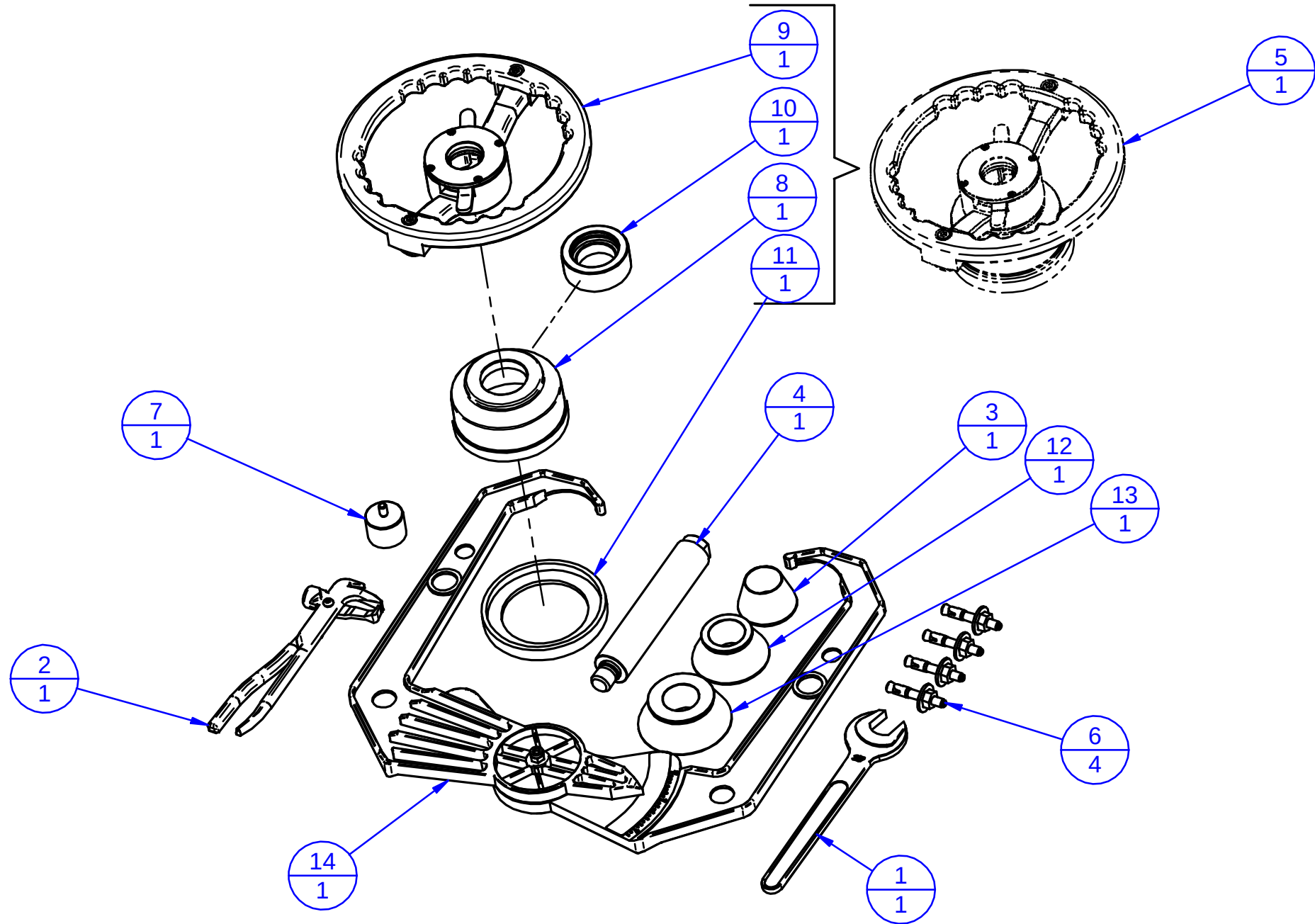
Legenda: 2 1 Ref. number Q.ty Sub-table exists	Codice (Code): 3M563	Descrizione / Description: Gruppo Carter Copriruota B2xx Safety Cover Assy	Rev: R2	Data (Date): 08/11/06	FASEP 2000 s.r.l. Ronta - Firenze - Italy
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POS	RSP	Codice (Code)	Descrizione	Description	Q.tà (Q.ty)
1		4M2861	Supporto per carter B2xx	Safety Cover Support	1
2		3M2857	Finecorsa per Carter	Microswitch	1
3		2M2869	Anello in Nylon	Bearing	2
4		4M2864	Anello di bloccaggio	Locking Ring	1
5		9E3124	Fascetta TY-272MX	TY-RAP Cable Tie	4
6		4M2868	Biella di battuta	Connecting Rod	1
7		9M2875	Piedino di battuta (PM ø20x15 M6)	Vibration dampers	2
8		4M2843	Tubo sostegno carter x B2xx	B2xx Tube	1
9		2M2842	Carter copriruota in ABS	Safety Cover	1
10		2M2061	Tappo ø 26 in Nylon	Plug	1



Legenda: 2 1 Ref. number Q.ty Sub-table exists	Codice (Code): 3M188-xx	Descrizione / Description: Dotazione Standard Equilibr. con Carter Standard Accessories for all off-the-car wheel balancers	Rev: R0	Data (Date): 05/09/06	FASEP FASEP 2000 s.r.l. Ronta - Firenze - Italy
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POS	RSP	Codice (Code)	Descrizione	Description	Q.tà (Q.ty)
1		9M2376	Chiave aperta di 27 (a una bocca)	Hex-key to lock shaft	1
2		9M1343	Pinza x Piombi	Weight pliers	1
3		2M0717-3	Cono 42/62 (Piccolo)	Small Cone	1
4		2M2144-1	Albero Filettato ø38x3 L=190	Shaft	1
5		3M1106-2	Volantino Blocc. Rapido ø38x3 Standard	Quick Lock	1
6		9M1345	Tassello di fissaggio	Bolts for tightening to the ground	4
7		4M1015	Peso x Taratura	Calibration weight	1
8		9M2504	Anello in gomma per Bloccaggio Rapido (Haweka)	Rubbercap	1
9		9M2502	Campana per Bloccaggio Rapido (Haweka)	Clamping Hood	1
10		9M2523-1	Bloccaggio Rapido ø38x3	Quick Lock	1
11		9M2503	Anello per Bloccaggio Rapido (Haweka)	Pressure Ring	1
12		2M0716-3	Cono 54/81 (Medio)	Medium Cone	1
13		2M0715-3	Cono 70/98 (Grande)	Large Cone	1
14		3M156	Calibro di misura	Width gauge	1



Legenda: Ref. number Q.ty Sub-table exists	Codice (Code): 3M188-yy	Descrizione / Description: Dotazione Standard Equilibr. No Carter Standard Accessories for all off-the-car wheel balancers	Rev: R0 Data (Date): 05/09/06	FASEP FASEP 2000 s.r.l. Ronta - Firenze - Italy
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POS	RSP	Codice (Code)	Descrizione	Description	Q.tà (Q.ty)
1		9M2376	Chiave aperta di 27 (a una bocca)	Hex-key to lock shaft	1
2		9M1343	Pinza x Piombi	Weight pliers	1
3		2M0717-3	Cono 42/62 (Piccolo)	Small Cone	1
4		2M2144-1	Albero Filettato ø38x3 L=190	Shaft	1
5		3M1106-3	Volantino Blocc. Rap. ø38x3 con Volante	Quick Lock with Steer	1
6		9M1345	Tassello di fissaggio	Bolts for tightening to the ground	4
7		4M1015	Peso x Taratura	Calibration weight	1
8		9M2502-2	Campana per Bloccaggio Rapido (Femas)	Clamping Hood	1
9		9M2523-2	Bloccaggio Rapido ø38x3 con Volante	Quick Lock with steer	1
10		9M2503-1	Anello x bloccaggio Rapido (Femas)	Spacer Cap	1
11		9M2504-1	Anello in gomma per Bloccaggio Rapido (Femas)	Rubbercap	1
12		2M0716-3	Cono 54/81 (Medio)	Medium Cone	1
13		2M0715-3	Cono 70/98 (Grande)	Large Cone	1
14		3M156	Calibro di misura	Width gauge	1

latest update 29/07/08

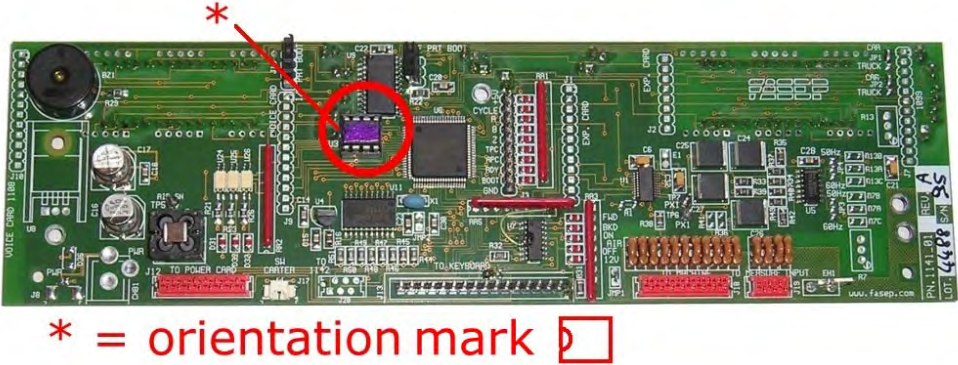
Applicable to: B212.G2, B221.G2, B306.G2,B331*,B441.G2

* B331 was born G2 directly (no B331.G1 exists)



FASEP Tech Doc 0123

How to maintain/restore the wheel balancer configuration after replacing 1141 board

Applicable to: - all units units equipped with 1141 pcb
INTRODUCTION: 1141 PCB holds the wheel balancer configuration memory. The memory contains serial number, counters, configuration of the wheel balancer. The memory is phisically stored on the IC X24C16. The configuration of the wheel balancer is strictly related to the hardware and software of the unit where it is placed, and it is essential for the good working of the unit. If, for any reason, the 1141 board has to be replaced, the memory X24C16 has to stay with the original unit. Therefore, absolutely X24C16 has to be removed from the old 1141 board and placed on the new 1141 being exchanged, to stay with the unit.
Procedure
1. Remove the IC X24C16 from 1141 you are replacing and move it to the board being put in place.
 * = orientation mark  fig. 1 - click to zoom
WARNING: Make sure to keep orientation of the chip same as the original.

[Home](#) > [Reserved Area](#) > Tech doc > [td0127](#)
latest update 11/04/08

FASEP Tech Doc 0127

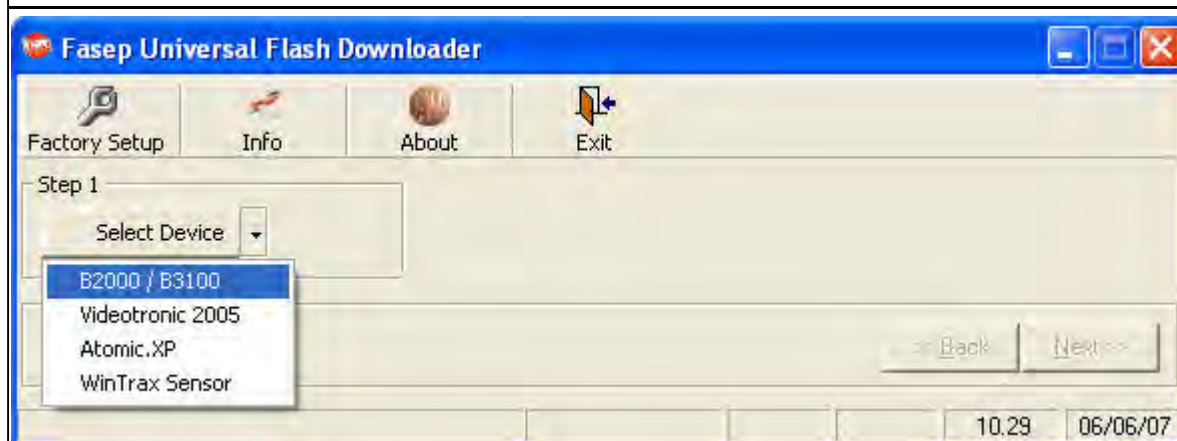
How to upgrade Balatron 16-bit using FasepUFD

These instructions are applicable to FasepUFD 1.3.0 or higher.
Download latest version of FasepUFD [here](#), if necessary.
FasepUFD must be installed on the computer before starting this procedure.
[V044](#) programming kit is also needed.

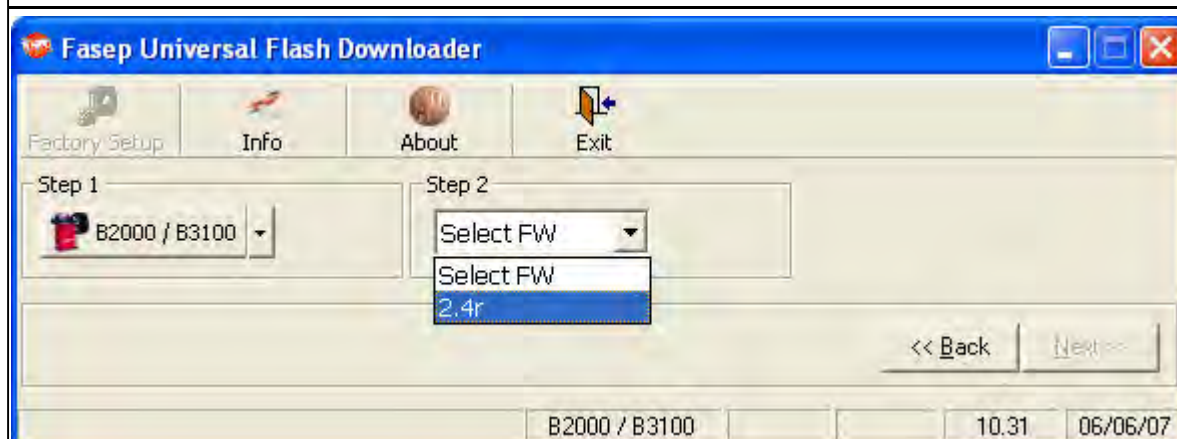


1. Connect [FASEP Hardware Key](#) to the computer (HW key is not needed version 2.0.0.0 or higher)

2. open FasepUFD program



3. select the B2000/B3100 device from the "select device" list > press NEXT



4. select 2.4r or higher from "select FW" list > press NEXT

Warning:

Always select latest fw version.

Old fw versions should be selected only if necessary or if recommended by the Fasep Support Service.

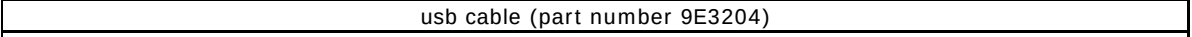


5. make sure 1116 programming interface is connected to [1113](#) board > press NEXT

Warning:

FasepUFD 1.3.0 or lower is not able to program [1141](#) boards (G2 type)



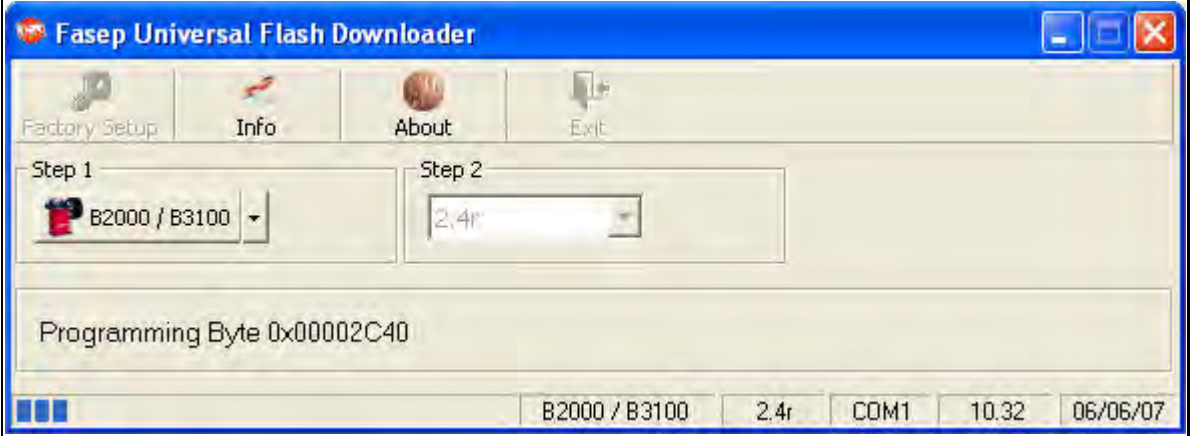


6. Make sure that 1116 is connected to the PC (serial or USB cable) > press NEXT

7. Make sure wheel balancer is turned ON

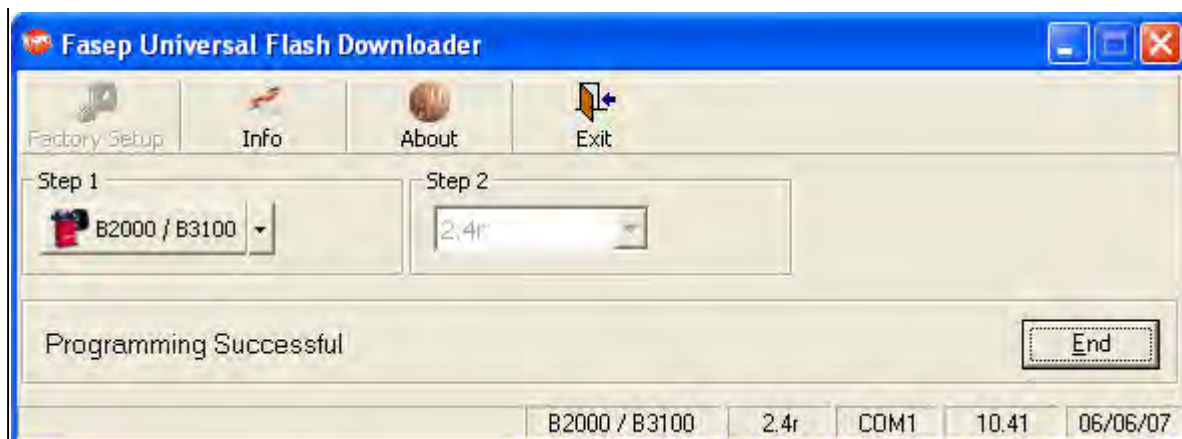


7. press START



8. Programming will start

Warning:
Do not interrupt programming procedure. Do not cut power supply during programming.

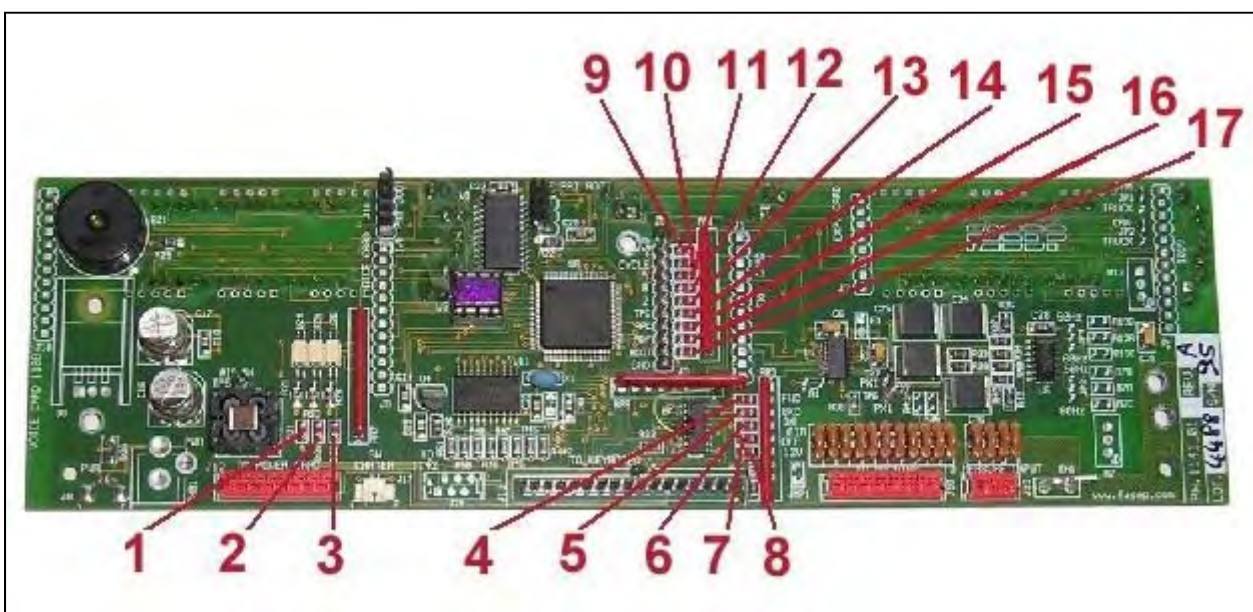


9. once programming is completed > press END to finish

[Home](#) > [Reserved Area](#) > Tech doc > [td0145](#)
latest update 06/12/07

FASEP Tech Doc 0145

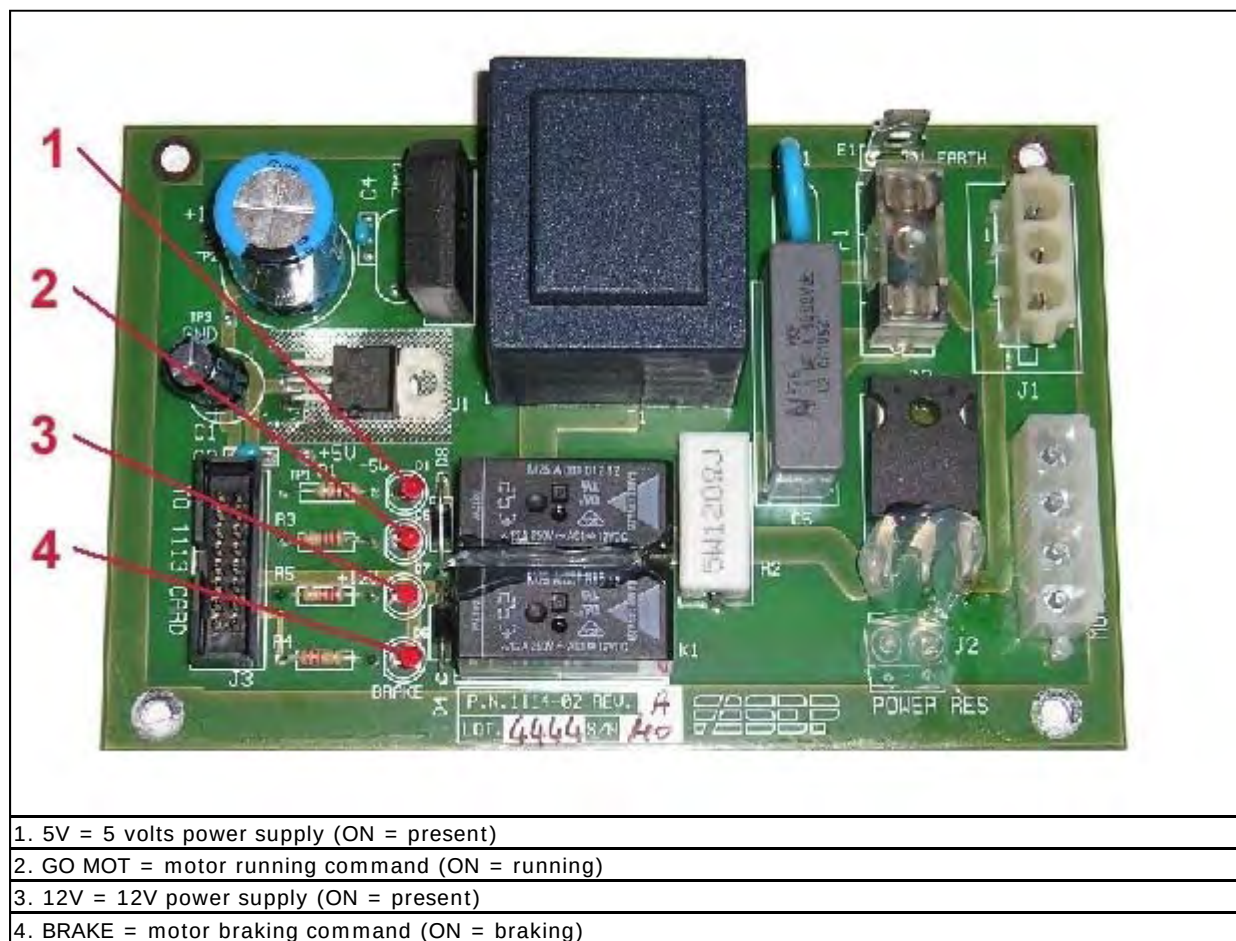
1141 troubleshooting guide



- | |
|--|
| 1. D31 = air sensor |
| 2. D32 = pneu lock switch |
| 3. D33 = carter |
| 4. FWD = Motor turn on |
| 5. BRAKE = motor braking command (ON = braking) |
| 6. ON = air lock |
| 7. OFF = air unlock |
| 8. 12V = 12V power supply (ON = present) |
| 9. +5V = 5 volts power supply (ON = present) |
| 10. CYCLE = microprocessor operation (must always be blinking > BLINK = correct operation) |
| 11. A = Encoder signal |
| 12. B = Encoder signal |
| 13. Z = Encoder signal |
| 14. TPC = PC communication signal |
| 15. RX PC = PC communication signal |
| 16. READY = PC communication signal |
| 17. BOOT = Microprocessor programming mode (ON during programming mode) |

FASEP Tech Doc 0141

1114 troubleshooting guide



FASEP Tech Doc 0152**How to replace piezo sensors on Wheel Balancers G2 16-bit series**

1. Remove the upper cover. Remove the 1140 board (**Fig. 1**)

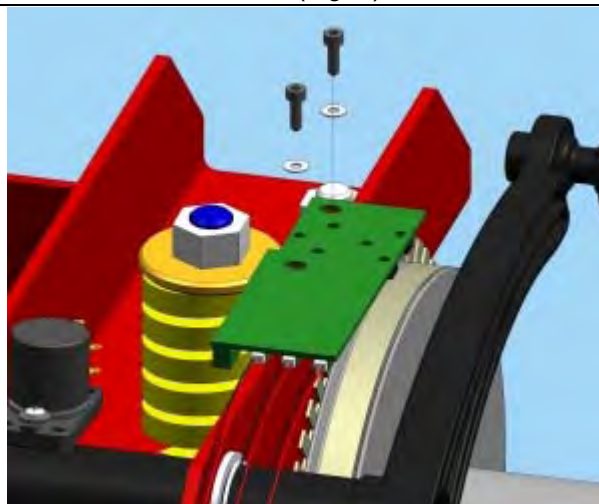


Fig. 1

2. Disconnect the piezos from 1140 board: J1 (PZ1A), J2 (PZ1B), J3 (PZ2) (**Fig. 2**)

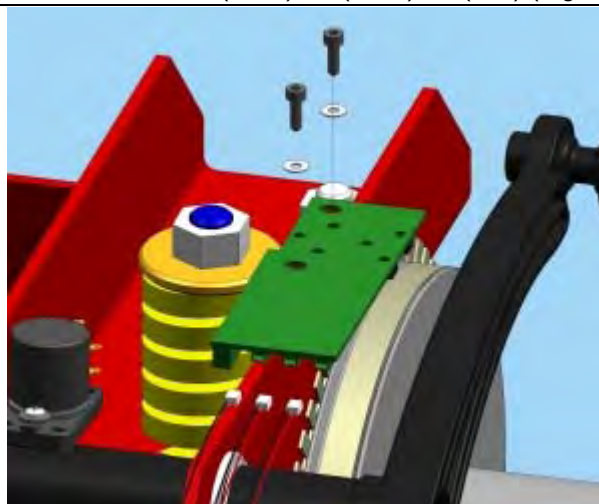


Fig. 2

3. Remove the nut locking the spring (**Fig. 3**)

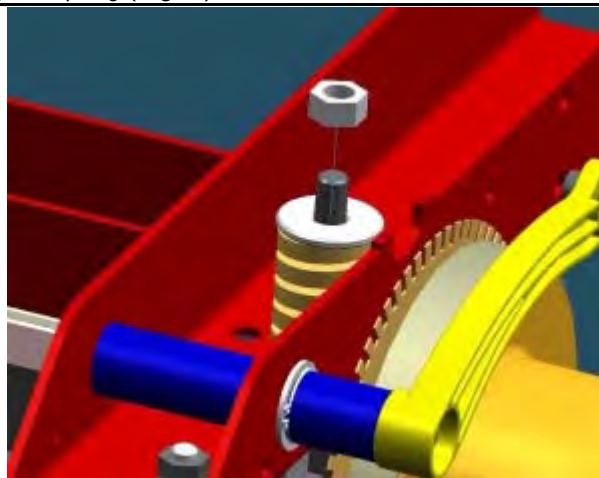


Fig. 3

4. Push down the shaft and remove the 2 piezos (**Fig. 4**)

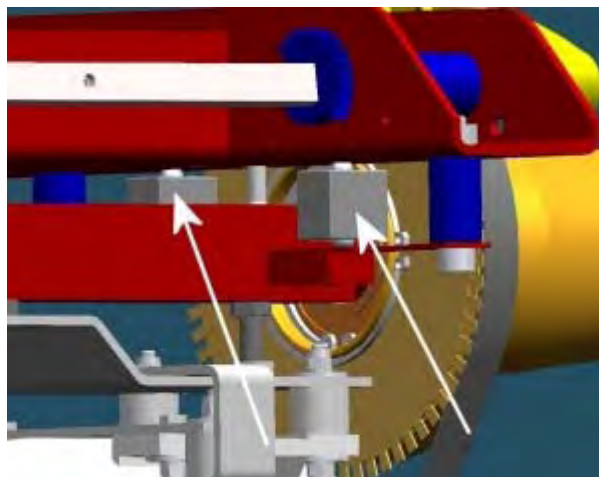


Fig. 4

5. Insert the new piezos.

6. Put the spring (**Fig. 3**) and the nut. Screw the nut until it starts compressing the spring, after that turn the nut **5 complete turns**.

7. Remove the 2 nuts (**Fig. 5**)

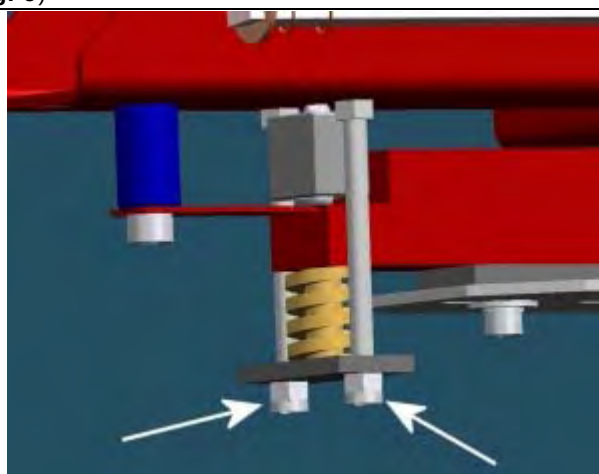


Fig. 5

8. Lift the shaft and remove the single piezo (**Fig. 5**)

9. Insert the new piezo

10. Put the spring (**Fig. 5**) and fix the nuts. Screw the nut until it starts compressing the spring, after that screw turn the nuts **3 complete turns**.

11. Put the 1140 board (**Fig. 1**) and connect the piezo to 1140 board: J1 (PZ1A), J2 (PZ1B), J3 (PZ2) (**Fig. 2**)

12. Calibrate the machine

How to check calibration of Automatic Measurement input Systems of Wheel Balancers



NOTE: *The wheel balancer we are checking can have a shaft or a flange different than the ones showed in the following images. The important thing is to bring the rod to touch to the internal side of the flange and to identify the correct issue on the reference tables*

ALU-SE ROD

Bring the rod to touch the flange, as showed in Fig. 4

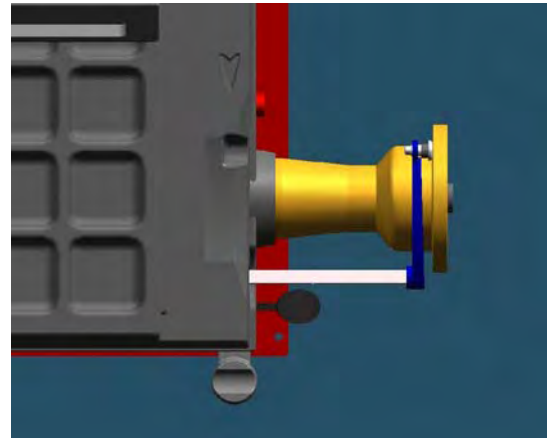


Fig. 4

Timeframe		Issue of mechanical assy	
From	To	HD/PL	LS
March 1998	February 2003	287 mm	
February 2003	-	307 mm	
December 2001	-		313 mm

SENSONIC ROD

Bring the rod to touch the flange, as showed in Fig. 5

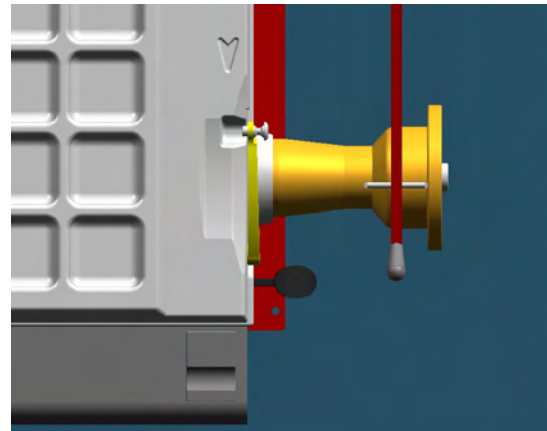


Fig. 5

Timeframe		Type of machine			
From	To	B-NEXUS	UTR/VDT/VDT2-CA/VDT92	VDO2/V571	V572/V573
-	December 1996		209 mm		
October 1995	January 2003			292 mm	
January 1996	February 2003	292 mm			
March 2003	-				313 mm

SME ROD



NOTE: *Before to check, make sure that there is not memorized a distance value. In this case press RESET to go to MAIN MENU.*

Bring the rod to touch the flange, as showed in Fig. 6

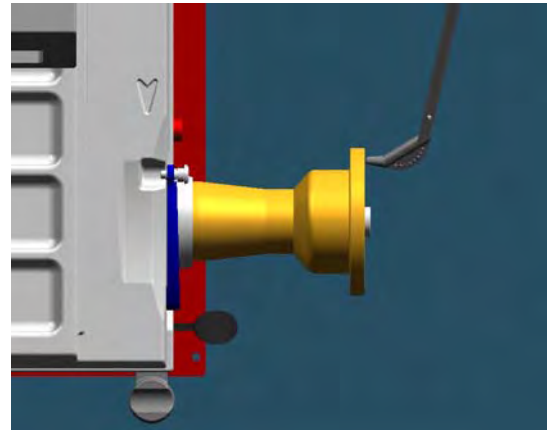


Fig. 6

Timeframe		Type of machine			
From	To	V551	V552/V553/V652	V651	B306/V642
September 2001	March 2003	316mm (12,5")			
March 2003	-		336mm (13")		
June 2002	June 2003			316mm (12,5")	
May 2003	-				336mm (13")

[Home](#) > [Reserved Area](#) > [Wheel Balancers](#) > Tech doc > [0134](#)
latest update 05/11/08

FASEP Tech Doc 0134

How to adjust ALU-SE sensors on Balatron 16 Bit

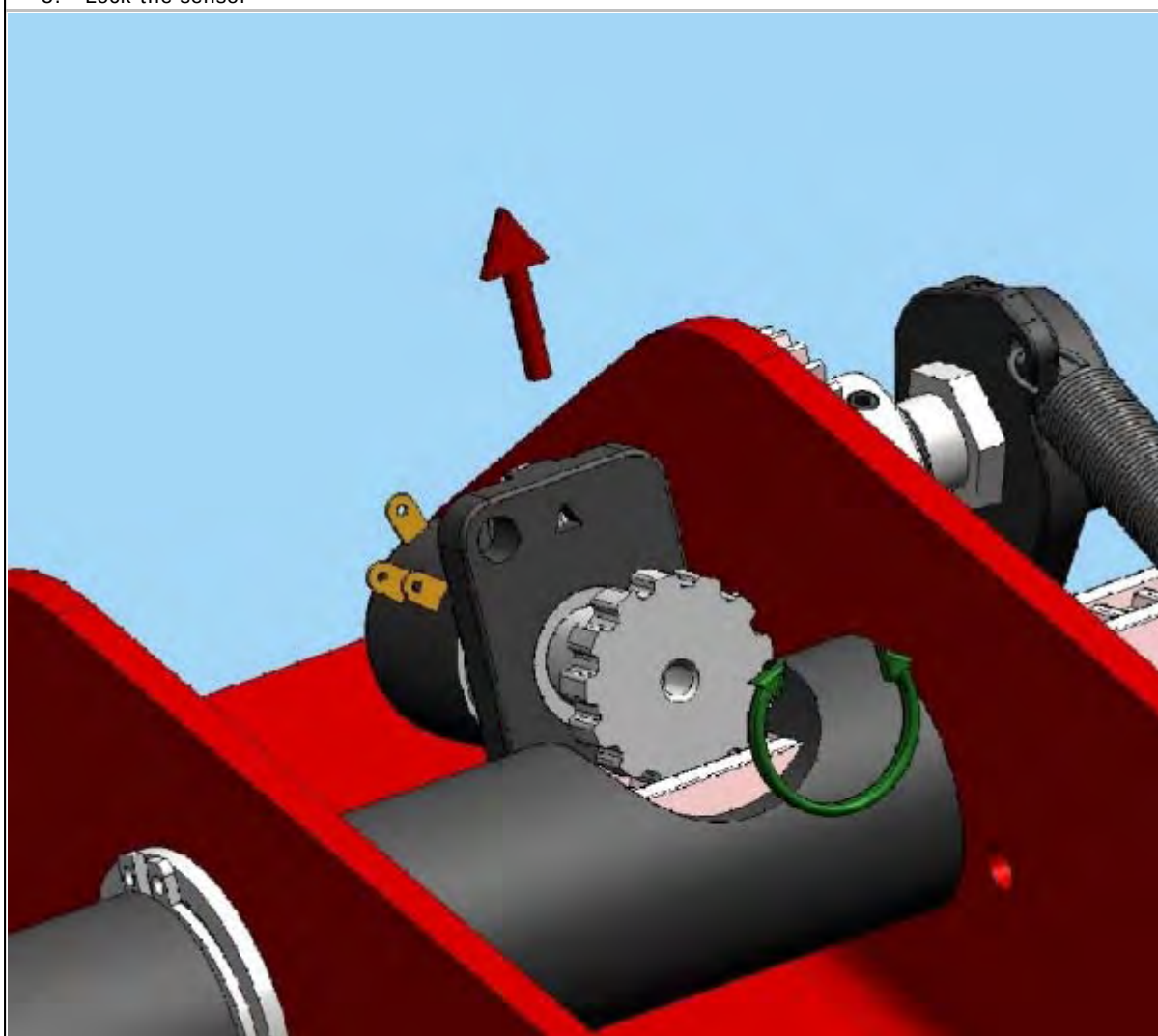
Applicable to: all units Balatron 16 Bit

1. Switch on the machine > SOF.xxx > press SET/OK to enter Setup > select SENSOR > press Set/ok for to confirm.

2. Remove weight tray

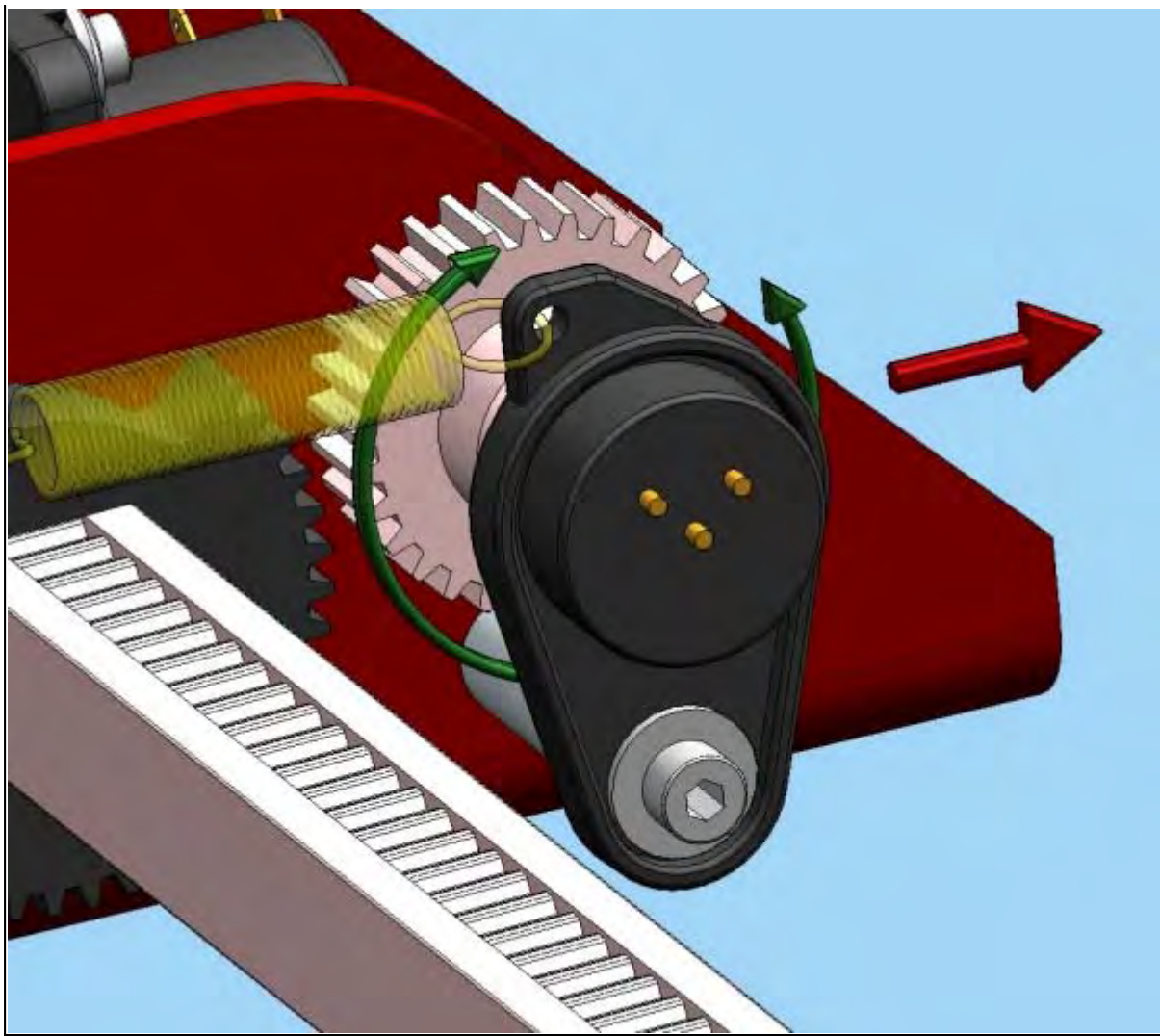
3. Adjustment of Distance sensors

1. Select DIS
2. Untighten screws of the potentiometer
3. Lift the sensor to free it from the gear
4. Turn the sensor until all LEDs are ON
5. Lock the sensor



4. Adjustment of Distance sensors

1. Selezionare DIA
2. Lift the sensor to free it from the gear as indicated in the picture
3. Turn the sensor until all LEDs are ON
4. Leave the sensor to be in working position



5. Calibrate the ALU-SE rod
see tech doc [0037](#)

Come calibrare i Sistemi Automatici di Misura su VDO

How to calibrate Electronic Input Systems on VDO

CALIBRAZIONE ASTA ALU-SE

MENU PRINCIPALE > UTILITY > ALU-S CALIBRATION

Posizionare l'asta come in **Figura 1** e premere **OK**

Posizionare l'asta come in **Figura 2** e premere **OK**

Posizionare l'asta come in **Figura 3** (cerchio di 14")

Premere **OK**

ALU-SE ROD CALIBRATION

MAIN MENU > UTILITY > ALU-S CALIBRATION

Place the rod as **Figure 1** and press **OK**

Place the rod as **Figure 2** and press **OK**

Place the rod as **Figure 3** (14" rim)

Press **OK**

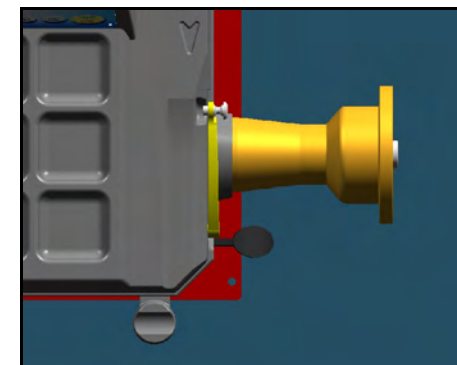


Figure 1

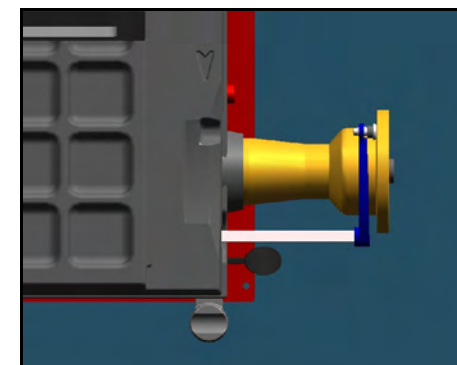


Figure 2

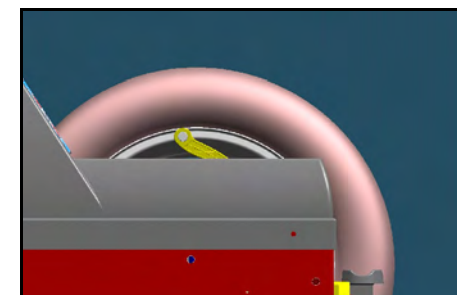


Figure 3

CALIBRAZIONE ASTA SENSONIC**MENU PRINCIPALE > UTILITY > CALIBRATION**

Posizionare l'asta come in **Figura 4** e premere **OK**

Posizionare l'asta come in **Figura 5** (massima estensione)

Premere **OK**

Posizionare l'asta come in **Figura 6** e premere **OK**

Posizionare l'asta come in **Figura 7** (cerchio di 14")

Premere **OK**

SENSONIC ROD CALIBRATION**MAIN MENU > UTILITY > CALIBRATION**

Place the rod as **Figure 4** and press **OK**

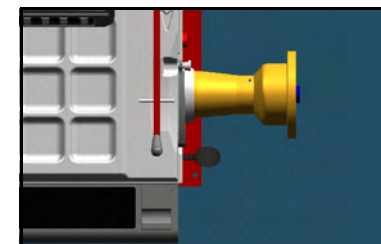
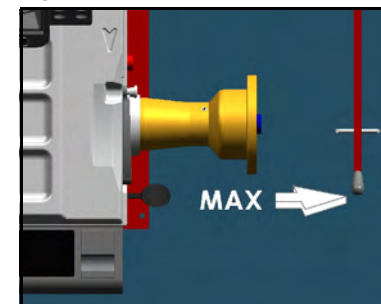
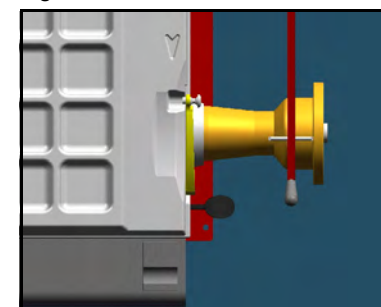
Place the rod as **Figure 5** (maximum extension)

Press **OK**

Place the rod as **Figure 6** and press **OK**

Place the rod as **Figure 7** (14" rim)

Press **OK**

**Figure 4****Figure 5****Figure 6****Figure 7**

CALIBRAZIONE SME**MENU PRINCIPALE > UTILITY > CALIBRATION**

Posizionare l'asta come in **Figura 8** e premere **OK**

Posizionare l'asta come in **Figura 9** e premere **OK**

SME ROD CALIBRATION**MAIN MENU > UTILITY > CALIBRATION**

Place the rod as **Figure 8** and press **OK**

Place the rod as **Figure 9** and press **OK**

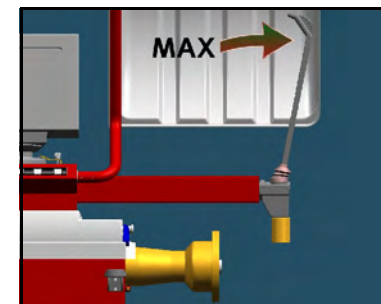


Figure 8

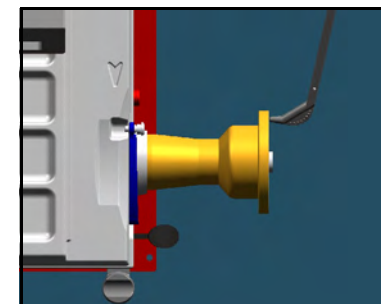


Figure 9

Error 0 - E0 blinking at startup.

Author:
Fasep 2000 srl

Created On: 08 May 2007 11:36 PM

Cause: problem is due to missing serial number of the unit in the 1113/1141 pcb memory.

Temporary workaround: press MODE/ESC to continue

Solution :

If the problem appears just after replacing 1113 (or 1141) board, install chip 24C16 that came with the original board equipped on the unit.

Error 1 - 'Position sensor or Motor Failure'

Author:
Fasep 2000 srl

Created On: 20 Sep 2007 08:55 AM

Applicable to: all wheel balancers 10-bit series, 16-bit G1 series, 16-bit G2 series

Italian: ENCODER DI POSIZIONE O MOTORE GUASTO ! nnn RPM

English: POSITION SENSOR OR MOTOR FAILURE ! nnn RPM

Espanol: ENCODER DE POSICION O MOTOR DANADO ! nnn RPM

Situation: the motor does not reach the required speed or the speed/position sensor does not detect the speed correctly. The actual speed detected is visualized in RPM at the right end of the error message (example 160 RPM)

1. (usually very low values of RPM)

Cause: pcb 1075 failed

Solution:Â replace 1075 pcb

2. (usually little less then normal values of RPM : 90 RPM in units with 98 RPM / 160 RPM in units with 166 RPM)

Cause: the motor does not reach the required speed

Solution: replace the motor

Error 2 - 'Reverse rotation or position sensor error'

Author:
Fasep 2000 srl

Created On: 20 Sep 2007 08:50 AM

Applicable to: all units with 3Ph motor

Cause: motor phases are inverted

Final solution:Â invert motor phases

Error 4 - Motor speed or pcb quartz failure

Author:
Fasep 2000 srl

Created On: 20 Mar 2007 11:50 PM

Italiano: Velocità motore o quarzo scheda errato

English : Motor speed or pcb quartz failure

Espanol: Velocidad del motor o quarzo del circuito con error

1.

Cause: Belt is worn

Solution: Replace belt

2.

Cause: the APS function does not work correctly

Temporary workaround: disable APS in User Setup

Final solution: upgrade to software 7.1e or higher

http://www.fasep.it/english/news/Updates/Videotronic16/Videotronic_16bit_update_latest.asp

Error 5 - 'Position sensor or Position Disk failure'

Author:
Fasep 2000 srl

Created On: 29 Oct 2007 12:13 PM

Applicable to: all wheel balancers 10-bit series, 16-bit G1 series, 16-bit G2 series

Italian: ENCODER GUASTO O POSIZIONATO MALE!

English: POSITION SENSOR FAILURE!

Espanol: ENCODER DANADO O MAL POSICIONADO!

Situation: the position sensor does not detect properly the reset point on the position disk.

Cause: cable of position sensor is not well connected

Solution: check connection (pin 1)

see also:

Balatron 16-bit > Setup > Sensor > T0 (*)

Videotronic 10-bit > main menu > utility > diagnostic > sensor (adc test) > Zero Encoder (*)

Videotronic 16-bit > main menu > utility > diagnostic > sensor (adc test) > Zero Encoder (*)

(*) The value must switch OFF-ON when the position disk reset point pass through the position sensor.

Error 8 - 'Calibration weight was not detected'

Author:
Fasep 2000 srl

Created On: 29 Oct 2007 10:57 PM

Situation: the calibration weight was not detected when required during calibration procedure

1.

cause: the calibration weight was not inserted

solution: insert the calibration weight , when required

2.

cause: the piezo sensor value is too small

solution: check connection or identify the piezo sensor with low signal (less then 1 Volt) and replace it

Balatron 16-bit: Go to Setup > Sensors > PS1 > Press Start to run the motor (calibration weight must be inserted) (press "DIAM (-)" to select PS2)

Error 17 - 'Bar not in position'

Author:
Fasep 2000 srl

Created On: 02 Oct 2007 09:46 AM

Applicable to: Balatron 16-bit, Videotronic 10-bit, Videotronic 16-bit, Videotronic CE

1.

Cause : the measuring bar (input gauge) is not in zero position

Solution : move the measuring bar to zero position

2.

Cause : the measuring bar is not calibrated

Solution : calibrate the measuring bar

3.

cause: the distance/diameter sensor is not adjusted

solution: adjust the distance/diameter sensor

Balatron 16-bit: <http://www.fasep.it/tech-doc/td0134.asp>

Videotronic 10-bit / 16-bit: <http://www.fasep.it/tech-doc/td0122.asp>

Error 19 - speed not stable

Author:
Fasep 2000 srl

Created On: 09 Jul 2007 09:24 AM

Cause: the speed is not stable within 4 sec after you started the motor (or hand-spin the wheel)

Solution: check motor / belt tensioning

Error 20 - excessive deceleration of rotation

Author:
Fasep 2000 srl

Created On: 09 Jul 2007 09:29 AM

Applicable to: hand spin models

situation: the rotation decelerated too rapidly

1.

cause: the wheel is not mounted on the shaft

solution: mount the wheel if not mounted

2.

cause: the brake is touching the wheel while turning

solution: make sure brake do not touch the wheel while turning

3.

cause: the wheel's own ball bearing have too much friction

solution: lubricate wheel's own ball bearings on wheel hub or use 3M604 cones kit with built-in ball bearings to ease rotation of motorcycle wheels

Error 21 - Error in inputting data

Author:
Fasep 2000 srl

Created On: 08 May 2007 11:40 PM

Applicable to : Balatron 16-bit

Situation: E21 appears using Alu-SE functions.

Cause: problem is due to a software bug.

Solution: Install 2.3c version or higher to fix the problem.

http://www.fasep.it/english/news/Updates/B2000/bal2000_update_latest.asp

Error 23 - unstable readings

Author:
Fasep 2000 srl

Created On: 09 Jul 2007 09:26 AM

Applicable to: all hand-spin wheel balancers

Situation: external vibrations are detected during measurement cycle (for example a wheel balancer is installed on a mobile service truck and someone is walking on the truck while wheel is spinned to check balance) so that measures are not stable

1.

cause: external vibrations

solution: remove cause of external vibration

2.

cause: sensibility is too high

solution: sensibility of external vibrations can be set in USER SETUP > SNR > 0=not active..5=max sensibility

Error 26 - Piezo sensor failure

Author:
Fasep 2000 srl

Created On: 08 May 2007 11:31 PM

Applicable to: Balatron 16-bit

Situation: when the balancer is switched ON, E26 is shown

Cause: problem is due a defective piezo sensors

Temporary workaround: wait at least 30 sec and then press MODE/ESC to continue

Solution:

Identify and replace the defective sensor.

(disconnect one by one the sensors until the error message disappears when switching on the unit)

Upgrading the software is also recommended:

<http://www.fasep.it/english/news/Updates/B2000/index.asp>

Error 32 - Service Lock

Author:
Fasep 2000 srl

Created On: 06 May 2008 09:23 AM

Applicable to: Videotronic.CE, Balatron 16-bit

Situation: the unit is locked after reaching the service interval

Cause: the unit has reached the maximum limit of service interval

Solution: contact Customer Support Service to get the service reset code

Before you contact FASEP Customer Support Service, make sure you have the following information available:

Videotronic.CE

1. Setup > Info Center > locate the following lines and send us the complete text contained in each line:

SERIAL NUMBER

NUMBER OF SPINS EXECUTED

2. Send the information required to support@fasep.it

3. Once you receive the Reset code, enter the Reset Code:

Setup > Activation Code > enter the code (change figures and letters by turning the wheel, memorize pressing OK).

Balatron 16-bit

1. Setup > locate the following lines and send us the complete text contained in each line:
SN (Serial number) (20 figures number)

2. Send the information required to support@fasep.it

3. Once you receive the Reset code, enter the Reset Code:

Setup > Activation Code > enter the code (change figures and letters by turning the wheel, memorize pressing OK).

Error 33 - Calibration check out of range

Author:
Fasep 2000 srl

Created On: 08 May 2007 10:31 PM

Note : before ERROR 33 was introduced (vers. sw 3.0 on Balatron 16-bit), ERROR appears at the end of calibration check procedure

Applicable to: Balatron 16-bit

Situation: the Err 33 appears on the display after calibration test spin is completed

1.

cause: the unit must be calibrated

solution: calibrate the wheel balancer

2.

Cause: problem may be caused by a broken piezo sensors

Solution: identify the piezo sensor broken and replace it.

3.

Cause: problem may be caused by unstable readings of piezo sensors because of malfunction of 1113 / 1141 board

Solution: replace the 1113 / 1141 board

Error 34 - Input gauge not in home position

Author:
Fasep 2000 srl

Created On: 16 Apr 2008 05:49 PM

Applicable to : Balatron 16-bit

Situation: the machine has just been switched on

1.

Cause: the distance/diameter input gauge was found out of home position at the time of start up of the wheel balancer

Solution: put the input gauge in home position

2.

Cause: the distance/diameter input gauge is not calibrated

Solution: calibrate the input gauge

Error 35 - Width Input gauge not in home position

Author:
Fasep 2000 srl

Created On: 16 Apr 2008 06:02 PM

Applicable to : Balatron 16-bit, Videotronic

Situation: the machine has just been switched on

1.

Cause: the width input gauge was found out of home position at the time of start up of the wheel balancer

Solution: put the input gauge in home position

2.

Cause: the width input gauge is not calibrated

Solution: calibrate the input gauge

Error 243

Author:
Fasep 2000 srl

Created On: 09 Jul 2007 09:27 AM

Cause: APS positioning cycle has been interrupted or APS could not complete positioning

Temporary workaround: disable APS

Sof xxx (press SET) > Setup > USR SET > APS > APS OFF > press SET to memorize.

Solution: install 2.4r version or higher to fix the problem.

<http://www.fasep.it/english/news/Updates/B2000/index.asp>